

United States District Court
Northern District of Texas
Office of the Clerk

Wichita Falls Division
1000 Lamar Street Room 203
Wichita Falls, TX 76301-3431

October 5, 2011

RECEIVED

Mr. Jan Horbaly, Clerk
U.S. Federal Circuit Court of Appeals
717 Madison Place N.W., Room 401
Washington, DC 20439

Oct 11 2011
United States Court of Appeals
For The Federal Circuit

SUBJECT: 7-09-cv-029-O; Lighting Ballast Control, LLC v Universal Lighting Technologies, Inc

Dear Mr. Horbaly:

In connection with the appeal cited above, the following documents are transmitted:

Certified copy of the notice of appeal and docket entries
 Certified copy of the notice of cross-appeal and docket entries
 Record on appeal consisting of _____ volume(s) of the record;
_____ Volume(s) of the transcript _____ Volume(s) of depositions
_____ Container(s) of exhibits _____ Folder(s) of State Court Papers
_____ Sealed documents _____ Audio Visual Tapes

ORIGINAL DOCUMENT(S) ENCLOSED--RETURN TO DISTRICT COURT

Supplemental record, including updated docket entries
 Other: _____

In regard to the notice of appeal, the following additional information is furnished:

The Court of Appeals docket fee has been paid
 This case is proceeding *in forma pauperis*
 A motion to proceed *in forma pauperis* on appeal is currently pending in district court.
 This case proceeded pursuant to 28 U.S.C. §1915 of the Prison Litigation Reform Act.
 The presiding judge entering the final judgment is: Reed O'Connor
 The court reporter assigned to this case is: Denver Roden
 This case was decided without a hearing, therefore there will be no transcript.
 UPS or FedEx Tracking #: Fedex 797592146950

Sincerely,
KAREN MITCHELL
Clerk of Court

By: /s/ Teena Timmons

Deputy Clerk

cc:

**IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF TEXAS
WICHITA FALLS DIVISION**

RECEIVED

LIGHTING BALLAST CONTROL LLC,)
)
Plaintiff,)
v.)
)
UNIVERSAL LIGHTING TECHNOLOGIES, INC.,)
)
Defendant.)

C.A. No. 7:09-cv-00029-O

United States Court of Appeals
For The Federal Circuit

09/12/11 10:14

NOTICE OF APPEAL

Please take notice that Defendant Universal Lighting Technologies, Inc. hereby appeals to the United States Court of Appeals for the Federal Circuit from the Final Judgment entered by this Court on August 26, 2011, in the above-captioned civil action (ECF No. 256), including but not limited to the Court's August 26, 2011 Memorandum Opinion & Order on judgment (ECF No. 255), the Court's May 4, 2011 Summary Judgment Order (ECF No. 172), the Court's May 25, 2011 Order on summary judgment issues (ECF No. 187), and the Court's December 2, 2011 Amended Memorandum Opinion and Order on claim construction (ECF No. 107), and all other rulings and verdicts embodied in the Final Judgment.

Defendant respectfully requests that the District Court Clerk's Office prepare the record of this action for transmission to the Court of Appeals at the earliest practical date so that the parties can move forward expeditiously with an appeal to the Federal Circuit.

I certify a true copy of an instrument
was filed in my office on 10/05/2011
U.S. District Court,
Northern District of Texas
Andrea Luck Young Deputy

Dated: September 12, 2011

Respectfully submitted,

/s/ Deborah L. Sterling

Deborah L. Sterling (Texas Bar No. 19170950)

Brenda T. Cubbage (Texas Bar No. 05201300)

SPENCER CRAIN CUBBAGE

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Attorneys for Defendant

Universal Lighting Technologies, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on September 12, 2011, a copy of the foregoing instrument has been served on all counsel listed below via electronic means.

/s/ Deborah L. Sterling

Jonathan T. Suder (jts@fsclaw.com)

David A. Skeels (skeels@fsclaw.com)

Friedman, Suder & Cooke

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Counsel for Plaintiff Lighting Ballast Control LLC

Page: 5 Filed: 10/12/2011
APPEAL, CLOSED, EXH-ADM, JURY, ROACH

U.S. District Court
Northern District of Texas (Wichita Falls)
CIVIL DOCKET FOR CASE #: 7:09-cv-00029-O
Internal Use Only

Lighting Ballast Control LLC v. Advance Transformer Co. et al
Assigned to: Judge Reed C O'Connor
Cause: 15:1126 Patent Infringement

Date Filed: 02/24/2009
Date Terminated: 08/26/2011
Jury Demand: Both
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

RECEIVE

10/12/2011

United States Court of Appeals
For the Federal Circuit**Plaintiff****Lighting Ballast Control LLC**

represented by **Jonathan T Suder**
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Certified a true copy of an instrument
on file in my office on 10/05/2011
Chk, U.S. District Court,
Northern District of Texas
By Ashley Park Young, Deputy

Jeffrey L Cureton
US District Court
501 W 10th St
Room 310
Fort Worth, TX 76102
817/850-6600
TERMINATED: 05/03/2010
Bar Status: Admitted/In Good Standing

V.

Defendant

Advance Transformer Co.
TERMINATED: 10/26/2009

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Defendant

Fulham Co., Inc.
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Defendant

General Electric Company
TERMINATED: 08/04/2009

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TERMINATED: 08/04/2009
Bar Status: Admitted/In Good Standing

Defendant

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Counter Defendant

Philips Electronics North America Corporation

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Counter Claimant**Universal Lighting Technologies, Inc.**

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V.

Counter Defendant

Lighting Ballast Control LLC

represented by **Jonathan T Suder**
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LEAD ATTORNEY
ATTORNEY TO BE NOTICED
Bar Status: Admitted/In Good Standing

David A Skeels
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Jeffrey L Cureton
(See above for address)
TERMINATED: 05/03/2010
Bar Status: Admitted/In Good Standing

Counter Claimant

Advance Transformer Co.
TERMINATED: 10/26/2009

represented by **Trey Yarbrough**
(See above for address)
Bar Status: Admitted/In Good Standing

V.

Counter Defendant**Lighting Ballast Control LLC**represented by **Jonathan T Suder**

(See above for address)

*LEAD ATTORNEY**ATTORNEY TO BE NOTICED**Bar Status: Admitted/In Good Standing***David A Skeels**

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*ATTORNEY TO BE NOTICED**Bar Status: Admitted/In Good Standing***Jeffrey L Cureton**

(See above for address)

*TERMINATED: 05/03/2010**Bar Status: Admitted/In Good Standing***Counter Claimant****Universal Lighting Technologies, Inc.**represented by **Deborah L Sterling**

(See above for address)

*LEAD ATTORNEY**ATTORNEY TO BE NOTICED**Bar Status: Admitted/In Good Standing***Brenda T Cubbage**

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*ATTORNEY TO BE NOTICED**Bar Status: Admitted/In Good Standing***Diana Szego**

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*PRO HAC VICE**ATTORNEY TO BE NOTICED**Bar Status: Not Admitted***Timothy Vann Pearce**

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*PRO HAC VICE**ATTORNEY TO BE NOTICED*

V.

Counter Defendant**Lighting Ballast Control LLC**represented by **Jonathan T Suder**

(See above for address)

*LEAD ATTORNEY**ATTORNEY TO BE NOTICED**Bar Status: Admitted/In Good Standing*

David A Skeels
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TERMINATED: 05/03/2010
Bar Status: Admitted/In Good Standing

Date Filed	#	Docket Text
09/30/2011	264	Appendix in Support filed by Lighting Ballast Control LLC re <u>263</u> Response/Objection to Defendant's Motion to Review and Objections to Plaintiff's Bill of Costs (Attachments: # <u>1</u> Additional Page(s)) (Skeels, David) (Entered: 09/30/2011)
09/30/2011	263	RESPONSE filed by Lighting Ballast Control LLC re: <u>260</u> MOTION Review and Objections to Bill of Costs (Skeels, David) (Entered: 09/30/2011)
09/26/2011	262	NOTICE OF APPEAL to the Federal Circuit by Lighting Ballast Control LLC. Filing fee \$455, receipt number 0539-4142061. T.O. form to appellant electronically at Transcript Order Form or US Mail as appropriate. Copy of NOA to be sent US Mail to parties not electronically noticed. (Suder, Jonathan) (Entered: 09/26/2011)
09/21/2011	261	Brief/Memorandum in Support filed by Universal Lighting Technologies, Inc. re <u>260</u> MOTION Review and Objections to Bill of Costs (Attachments: # <u>1</u> Declaration(s), # <u>2</u> Exhibit(s)) (Sterling, Deborah) (Entered: 09/21/2011)
09/21/2011	260	MOTION Review and Objections to Bill of Costs filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 09/21/2011)
09/21/2011	259	Costs Taxed in amount of \$ 79,399.26 against Defendant (trt) (Entered: 09/21/2011)
09/12/2011	258	NOTICE OF APPEAL to the Federal Circuit as to <u>172</u> Order on Motion for Summary Judgment, Order on Motion for Leave to File, <u>107</u> Memorandum Opinion and Order, <u>187</u> Order on Motion for Reconsideration,, Order on Motion for Leave to File,,, <u>255</u> Memorandum Opinion and Order, <u>256</u> Judgment,, by Universal Lighting Technologies, Inc.. Filing fee \$455, receipt number 0539-4114321. T.O. form to appellant electronically at Transcript Order Form or US Mail as appropriate. Copy of NOA to be sent US Mail to parties not electronically noticed. (Sterling, Deborah) (Entered: 09/12/2011)
09/07/2011	257	BILL OF COSTS by Lighting Ballast Control LLC. (Attachments: # <u>1</u> Exhibit(s) A, # <u>2</u> Exhibit(s) B, # <u>3</u> Exhibit(s) C, # <u>4</u> Exhibit(s) D, # <u>5</u>

		Exhibit(s) E, # 6 Exhibit(s) F) (Skeels, David) (Entered: 09/07/2011)
08/26/2011	256	JUDGMENT Pursuant to LR 79.2 and LCrR 55.2, exhibits may be claimed during the 60-day period following final disposition (to do so, follow the procedures found at www.txnd.uscourts.gov/Court Records). The clerk will discard exhibits that remain unclaimed after the 60-day period without additional notice. (Clerk to notice any party not electronically noticed.) (Ordered by Judge Reed C O'Connor on 8/26/2011) (trt) (Entered: 08/26/2011)
08/26/2011	255	Memorandum Opinion and Order. Accordingly, ULTs Motion for Judgment as a Matter of Law should be and is hereby DENIED, and LBCs Motion for Entry of Judgment is GRANTED in part and DENIED in part. It is therefore ORDERED that the damages verdict of \$3,000,000.00 stands and represents a lump-sum royalty payment. It is further ORDERED that the Court awards prejudgment interest from the date of first infringement at the Texas statutory rate of 5%, compounded annually, amounting to \$1,543,479.20, bringing the total award to \$4,543,479.20, and post-judgment interest from the date of judgment at the rate set by 28 U.S.C. § 1961. (Ordered by Judge Reed C O'Connor on 8/26/2011) (trt) (Entered: 08/26/2011)
08/12/2011	254	RESPONSE filed by Lighting Ballast Control LLC re: 253 Sealed and/or Ex Parte Response/Objection, (Suder, Jonathan) (Entered: 08/12/2011)
08/10/2011	253	(Document Restricted) Sealed Response and Objection re: 250 Reply (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # 1 Appendix Part 1, # 2 Appendix Part 2, # 3 Appendix Part 3) (Sterling, Deborah) (Entered: 08/10/2011)
08/01/2011	252	(Document Restricted) Sealed Reply re: 246 Sealed and/or Ex Parte Motion, (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # 1 Appendix) (Sterling, Deborah) (Entered: 08/01/2011)
08/01/2011	251	Appendix in Support filed by Lighting Ballast Control LLC re 250 Reply <i>in Support of its Motion for Judgment</i> (Suder, Jonathan) (Entered: 08/01/2011)
08/01/2011	250	REPLY filed by Lighting Ballast Control LLC re: 244 MOTION for Judgment (Suder, Jonathan) (Entered: 08/01/2011)
07/18/2011	249	(Document Restricted) Sealed Response re: 244 Motion for Judgment (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # 1 Appendix Part 1/3, # 2 Appendix Part 2/3, # 3 Appendix Part 3/3) (Sterling, Deborah) (Entered: 07/18/2011)
07/18/2011	248	Appendix in Support filed by Lighting Ballast Control LLC re 247 Response/Objection (Suder, Jonathan) (Entered: 07/18/2011)
07/18/2011	247	RESPONSE filed by Lighting Ballast Control LLC re: 246 Sealed Motion for Judgment as a Matter of Law (Sealed pursuant to order dated

		2/2/2010)Sealed Motion for Judgment as a Matter of Law (Sealed pursuant to order dated 2/2/2010) (Suder, Jonathan) (Entered: 07/18/2011)
06/27/2011	246	(Case Participants) Sealed Motion for Judgment as a Matter of Law (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Brief in Support of Motion, # <u>2</u> Appendix Part 1, # <u>3</u> Appendix Part 2, # <u>4</u> Appendix Part 3) (Sterling, Deborah) (Entered: 06/27/2011)
06/27/2011	245	Appendix in Support filed by Lighting Ballast Control LLC re <u>244</u> MOTION for Judgment (Suder, Jonathan) Modified on 6/27/2011 (apy). (Entered: 06/27/2011)
06/27/2011	244	MOTION for Judgment filed by Lighting Ballast Control LLC with Brief/Memorandum in Support. (Suder, Jonathan) Modified on 6/27/2011 (apy). (Entered: 06/27/2011)
06/18/2011	242	ORDER to file motion for judgment: see order for details.(Ordered by Judge Reed C O'Connor on 6/18/2011)(Judge Reed C O'Connor) (Entered: 06/18/2011)
06/17/2011	243	ELECTRONIC Minute Entry for proceedings held before Judge Reed C O'Connor: Jury Trial completed on 6/17/2011. (Court Reporter: Denver Roden) (Exhibits admitted) Time in Court - 2:55. (chmb) (Entered: 06/21/2011)
06/17/2011	241	JURY VERDICT. (trt) (Entered: 06/17/2011)
06/17/2011	240	Jury Note Number 3. (trt) (Entered: 06/17/2011)
06/17/2011	239	Proposed Jury Charge filed by Universal Lighting Technologies, Inc.. (Sterling, Deborah) (Entered: 06/17/2011)
06/17/2011	238	Jury Note Number 2. (trt) (Entered: 06/17/2011)
06/17/2011	237	Jury Note Number 1. (trt) (Entered: 06/17/2011)
06/17/2011	235	ORDER: In consideration of the jurors circumstances, the Court ORDERS that meals be provided for the jury while they deliberate this case. See Order for further specifics. (Ordered by Judge Reed C O'Connor on 6/17/2011) (trt) (Entered: 06/17/2011)
06/17/2011	233	AMENDED DOCUMENT by Lighting Ballast Control LLC. Amendment to <u>231</u> Proposed Jury Charge/Instructions.. (Suder, Jonathan) (Entered: 06/17/2011)
06/16/2011	236	ELECTRONIC Minute Entry for proceedings held before Judge Reed C O'Connor: Day #4 of Jury Trial held on 6/16/2011. Continued until 9:00am, June 17, 2011. (Court Reporter: Denver Roden) (Exhibits admitted) Time in Court - 9:03. (chmb) (Entered: 06/17/2011)
06/16/2011	234	Agreed Jury Charge. The parties submitted charge language. (apy) (Entered: 06/17/2011)

06/16/2011	<u>232</u>	TRIAL BRIEF <i>on Connected To Language</i> by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/16/2011)
06/16/2011	<u>231</u>	Proposed Jury Charge filed by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/16/2011)
06/16/2011	<u>230</u>	Proposed Jury Charge filed by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/16/2011)
06/16/2011	<u>228</u>	TRIAL BRIEF <i>On Testimony of Tom Poehlman</i> by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/16/2011)
06/15/2011	<u>229</u>	ELECTRONIC Minute Entry for proceedings held before Judge Reed C O'Connor: Day #3 of Jury Trial held on 6/15/2011. Jury Trial continued until 9:00am 6/16/2011. (Court Reporter: Denver Roden) (Exhibits admitted) Time in Court - 9:39. (chmb) (Entered: 06/16/2011)
06/14/2011	<u>227</u>	ELECTRONIC Minute Entry for proceedings held before Judge Reed C O'Connor: Day #2 of Jury Trial held on 6/14/2011. Continued until 9:00am, June 15, 2011. (Court Reporter: Denver Roden) (Exhibits admitted) Time in Court - 9:27. (chmb) (Entered: 06/15/2011)
06/14/2011	<u>225</u>	Brief/Memorandum in Support filed by Universal Lighting Technologies, Inc. re <u>204</u> MOTION Request Ruling on Prior Art Exhibits (Sterling, Deborah) (Entered: 06/14/2011)
06/13/2011	<u>226</u>	ELECTRONIC Minute Entry for proceedings held before Judge Reed C O'Connor: Jury Trial begun on 6/13/2011. Trial continued to Tuesday, June 14, 2011 at 9:00am. (Court Reporter: Denver Roden) (Exhibits admitted) Time in Court - 10:00. (chmb) (Entered: 06/15/2011)
06/13/2011	<u>224</u>	Jury Roll. (trt) (Entered: 06/13/2011)
06/13/2011	<u>223</u>	AMENDED DOCUMENT by Lighting Ballast Control LLC. Amendment to <u>222</u> Reply. <i>to Defendant's Response Plaintiff's Motion in Limine.</i> (Attachments: # <u>1</u> Exhibit(s) Exhibit A) (Suder, Jonathan) (Entered: 06/13/2011)
06/13/2011	<u>222</u>	REPLY filed by Lighting Ballast Control LLC re: <u>219</u> Supplemental MOTION in Limine (Attachments: # <u>1</u> Exhibit(s) Exhibit A) (Suder, Jonathan) (Entered: 06/13/2011)
06/12/2011	<u>221</u>	(Case Participants) Sealed Motion to Strike June 10 Gallagher Supplemental Report (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Exhibit A) (Sterling, Deborah) (Entered: 06/12/2011)
06/12/2011	<u>220</u>	RESPONSE filed by Universal Lighting Technologies, Inc. re: <u>219</u> Supplemental MOTION in Limine (Sterling, Deborah) (Entered: 06/12/2011)
06/12/2011	<u>219</u>	Supplemental MOTION in Limine filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 06/12/2011)

06/11/2011	218	ELECTRONIC ORDER: each side will have 30 minutes for opening statements.(Ordered by Judge Reed C O'Connor on 6/11/2011)(Judge Reed C O'Connor) (Entered: 06/11/2011)
06/10/2011	217	NOTICE {Amended} [Joint] Notice Regarding Juror Notebooks re: 216 Notice (Other) filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Attachments: # 1 Exhibit(s) A, # 2 Exhibit(s) B, # 3 Exhibit(s) C) (Suder, Jonathan) (Entered: 06/10/2011)
06/10/2011	216	NOTICE [Joint] Regarding Juror Notebooks filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Suder, Jonathan) (Entered: 06/10/2011)
06/10/2011	215	ORDER granting in part and denying in part 132 Motion to Strike ; granting in part and denying in part sealed and/or ex parte motion 158 . Accordingly, ULTs Motion to Strike Gallaghers expert report is GRANTED to the extent that Gallagher relies on the GE License and discusses ULTs incremental profit margin. As to the remainder of Gallaghers report, ULTs Motion to Strike is DENIED. ULTs Motion in Limine is GRANTED as indicated above with respect to Roman Numerals II, III, and IV and DENIED with respect to Roman Numeral I regarding the 529 patents presumed validity. (Ordered by Judge Reed C O'Connor on 6/10/2011) (trt) . (Entered: 06/10/2011)
06/10/2011	214	ELECTRONIC ORDER granting 199 Motion for Leave to Appear Without Local Counsel. (Ordered by Judge Reed C O'Connor on 6/10/2011) (chmb)(kgc) (Entered: 06/10/2011)
06/09/2011	213	REPLY filed by Universal Lighting Technologies, Inc. re: 204 MOTION Request Ruling on Prior Art Exhibits (Sterling, Deborah) (Entered: 06/09/2011)
06/09/2011	212	NOTICE [amended] Notice of U.S. Supreme Court Decision in Microsoft Corp. v. i4i Limited Partnership re: 211 Notice (Other) filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 06/09/2011)
06/09/2011	211	NOTICE of U.S. Supreme Court Decision in Microsoft Corp. v. i4i Limited Partnership filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 06/09/2011)
06/08/2011	210	RESPONSE filed by Lighting Ballast Control LLC re: 204 MOTION Request Ruling on Prior Art Exhibits (Suder, Jonathan) (Entered: 06/08/2011)
06/08/2011	209	STIPULATION [re product groups] by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Attachments: # 1 Exhibit(s) A) (Suder, Jonathan) (Entered: 06/08/2011)
06/08/2011	208	Witness List by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/08/2011)
06/08/2011	207	ORDER granting 190 Emergency Motion for Leave to Amend Witness List. It is therefore ORDERED that Plaintiff LBCs Emergency Motion for

		Leave to Amend Witness List is hereby GRANTED. (Ordered by Judge Reed C O'Connor on 6/8/2011) (trt) (Entered: 06/08/2011)
06/08/2011	206	Exhibit List (<i>Amended Joint Exhibit List</i>) by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Suder, Jonathan) (Entered: 06/08/2011)
06/07/2011	205	Appendix in Support filed by Universal Lighting Technologies, Inc. re <u>204</u> MOTION Request Ruling on Prior Art Exhibits (Attachments: # <u>1</u> Exhibit(s) A, # <u>2</u> Exhibit(s) A-1, # <u>3</u> Exhibit(s) A-2, # <u>4</u> Exhibit(s) A-3, # <u>5</u> Exhibit(s) A-4, # <u>6</u> Exhibit(s) A-5, # <u>7</u> Exhibit(s) A-6, # <u>8</u> Exhibit(s) B) (Sterling, Deborah) (Entered: 06/07/2011)
06/07/2011	204	MOTION Request Ruling on Prior Art Exhibits filed by Universal Lighting Technologies, Inc. with Brief/Memorandum in Support. (Sterling, Deborah) (Entered: 06/07/2011)
06/06/2011	203	Proposed Jury Charge filed by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/07/2011)
06/06/2011	202	Exhibit List by Universal Lighting Technologies, Inc.. (Sterling, Deborah) (Entered: 06/06/2011)
06/06/2011	201	Proposed Jury Instructions filed by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/06/2011)
06/06/2011	200	Exhibit List (<i>Joint Exhibit List</i>) by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Suder, Jonathan) (Entered: 06/06/2011)
06/06/2011	199	Unopposed MOTION for Leave to Appear Without Local Counsel <i>as Defined Under L.R. 83.10(a)</i> filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 06/06/2011)
06/06/2011	198	Exhibit List (<i>Plaintiff's Exhibit List</i>) by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 06/06/2011)
06/03/2011	197	Joint STATUS REPORT [<i>amended</i>] <i>Regarding Products in the Case</i> filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Suder, Jonathan) (Entered: 06/03/2011)
06/03/2011	196	***SEE <u>197</u> FOR CORRECT IMAGE***Joint STATUS REPORT <i>Regarding Products in the Case</i> filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Suder, Jonathan) Modified on 6/6/2011 (trt). (Entered: 06/03/2011)
06/03/2011	195	NOTICE re: <u>190</u> Emergency MOTION for Leave to File Amended Witness List MOTION to Amend/Correct <u>156</u> Witness List filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 06/03/2011)
06/03/2011	194	RESPONSE filed by Universal Lighting Technologies, Inc. re: <u>190</u> Emergency MOTION for Leave to File Amended Witness List MOTION to Amend/Correct <u>156</u> Witness List (Sterling, Deborah) (Entered: 06/03/2011)

06/02/2011	 193	Witness List by Universal Lighting Technologies, Inc.. (Sterling, Deborah) (Entered: 06/02/2011)
06/01/2011	 192	NOTICE OF FILING OF OFFICIAL ELECTRONIC TRANSCRIPT of Pretrial Conference Proceedings held on 05-26-11 before Judge Reed O'Connor. Court Reporter/Transcriber Denver B Roden, RPR, RMR, Telephone number 214-753-2298. Parties are notified of their <u>duty to review</u> the transcript. A copy may be purchased from the court reporter or viewed at the clerk's office public terminal. If redaction is necessary, a <u>Redaction Request - Transcript</u> must be filed within 21 days. If no such Request is filed, the transcript will be made available via PACER without redaction after 90 calendar days. If redaction request filed, this transcript will not be accessible via PACER; see redacted transcript. The clerk will mail a copy of this notice to parties not electronically noticed. (39 pages) Redaction Request due 6/22/2011. Redacted Transcript Deadline set for 7/5/2011. Release of Transcript Restriction set for 8/30/2011. (dbr) (Entered: 06/01/2011)
06/01/2011	 191	Joint STATUS REPORT <i>Regarding Product Groups 5 and 8</i> filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Suder, Jonathan) (Entered: 06/01/2011)
06/01/2011	 190	(Case Participants) Emergency MOTION for Leave to File Amended Witness List(), MOTION to Amend/Correct <u>156</u> Witness List filed by Lighting Ballast Control LLC with Brief/Memorandum in Support. (Attachments: # <u>1</u> Exhibit(s) A, # <u>2</u> Exhibit(s) B) (Suder, Jonathan) (Entered: 06/01/2011)
05/27/2011	 188	NOTICE of <i>Link to Patent Video</i> filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 05/27/2011)
05/26/2011	 189	(Case Participants) ELECTRONIC Minute Entry for proceedings held before Judge Reed C O'Connor: Pretrial Conference held on 5/26/2011. GRANTING Plaintiff LBC's Motion in Limine. DENYING Plaintiff LBC's Motion to Strike testimony of Dr. Giesselman and of ULT's seventeen "Non-retained" experts. GRANTING in part, DENYING in part, and reserving in part Defendant ULT's Motion to Strike. GRANTING in part, DENYING in part, and reserving in part Defendant ULT's Motion in Limine. Request/see transcript for details. (Court Reporter: Denver Roden) (No exhibits) Time in Court - :48. (chmb) (Entered: 05/31/2011)
05/25/2011	 187	ORDER granting in part and denying in part <u>173</u> Plaintiff Lighting Ballast Control, LLC's Emergency Motion for Reconsideration and Clarification; denying <u>176</u> Defendant Universal Lighting Technologies, Inc.'s Motion for Reconsideration; and finding as moot <u>186</u> Plaintiff Lighting Ballast Control, LLC's Motion for Leave to File Sur-Reply. (Ordered by Judge Reed C O'Connor on 5/25/2011) (chmb)(kgc) (Entered: 05/25/2011)
05/23/2011	 186	MOTION for Leave to File Sur-Reply to <i>LBCs Reply In Support of Its Emergency Motion for Reconsideration and Clarification</i> filed by

		Universal Lighting Technologies, Inc. with Brief/Memorandum in Support. (Attachments: # <u>1</u> Exhibit A) (Sterling, Deborah) (Entered: 05/23/2011)
05/20/2011	<u>185</u>	REPLY filed by Universal Lighting Technologies, Inc. re: <u>176</u> MOTION for Reconsideration re <u>172</u> Order on Motion for Summary Judgment, Order on Motion for Leave to File or <i>Clarification</i> (Sterling, Deborah) (Entered: 05/20/2011)
05/18/2011	<u>184</u>	RESPONSE filed by Lighting Ballast Control LLC re: <u>176</u> MOTION for Reconsideration re <u>172</u> Order on Motion for Summary Judgment, Order on Motion for Leave to File or <i>Clarification</i> (Suder, Jonathan) (Entered: 05/18/2011)
05/17/2011	<u>183</u>	ORDER: Pretrial Conference set for 5/26/2011 09:30 AM in US Courthouse, Courtroom 1516, 1100 Commerce St., Dallas, TX 75242-1310 before Judge Reed C O'Connor. Counsel for Plaintiff Lighting Ballast Control, LLC and for Defendant Universal Lighting Technologies, Inc. are hereby ORDERED to appear and be prepared to discuss all issues related to the upcoming jury trial. (Ordered by Judge Reed C O'Connor on 5/17/2011) (apy) (Entered: 05/17/2011)
05/16/2011	<u>182</u>	(Case Participants) Appendix to Plaintiff's Reply in Support of its Emergency Motion for Reconsideration adn Clarification [ECF No. 173] (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 05/16/2011)
05/16/2011	<u>181</u>	(Case Participants) Plaintiff's Reply in Support of its Emergency Motion for Reconsideration and Clarification [ECF No. 173] (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 05/16/2011)
05/12/2011	<u>180</u>	NOTICE of Attorney Appearance by Glenn S Orman on behalf of Lighting Ballast Control LLC. (Orman, Glenn) (Entered: 05/12/2011)
05/11/2011	<u>179</u>	(Case Participants) Sealed ULT's Opposition to LBC's Emergency Motion for Reconsideration and Clarification of Summary Judgment Order (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Exhibit(s) 1-5) (Sterling, Deborah) (Entered: 05/11/2011)
05/10/2011	<u>178</u>	Designation of Deposition by Lighting Ballast Control LLC. (Skeels, David) (Entered: 05/10/2011)
05/09/2011	<u>177</u>	Brief/Memorandum in Support filed by Universal Lighting Technologies, Inc. re <u>176</u> MOTION for Reconsideration re <u>172</u> Order on Motion for Summary Judgment, Order on Motion for Leave to File or <i>Clarification</i> (Sterling, Deborah) (Entered: 05/09/2011)
05/09/2011	<u>176</u>	MOTION for Reconsideration re <u>172</u> Order on Motion for Summary Judgment, Order on Motion for Leave to File or <i>Clarification</i> filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 05/09/2011)

05/09/2011	<u>175</u>	OBJECTION filed by Universal Lighting Technologies, Inc. re: <u>152</u> Response/Objection, <u>153</u> Designation of Deposition (Attachments: # <u>1</u> Exhibit(s) A) (Sterling, Deborah) (Entered: 05/09/2011)
05/06/2011	<u>174</u>	ELECTRONIC ORDER taking under advisement <u>173</u> Emergency Motion for Reconsideration and directing Defendant to respond to this motion no later than 5/11/2011.(Ordered by Judge Reed C O'Connor on 5/6/2011) (Judge Reed C O'Connor) (Entered: 05/06/2011)
05/06/2011	<u>173</u>	Emergency MOTION for Reconsideration re <u>172</u> Order on Motion for Summary Judgment, Order on Motion for Leave to File <i>and Request for Expedited Briefing Thereon</i> filed by Lighting Ballast Control LLC with Brief/Memorandum in Support. (Attachments: # <u>1</u> Exhibit(s) A) (Suder, Jonathan) (Entered: 05/06/2011)
05/04/2011	<u>172</u>	ORDER granting in part and denying in part <u>126</u> Motion for Summary Judgment. ; denying <u>140</u> Motion for Leave to File Sur-reply. See Order for specifics. (Ordered by Judge Reed C O'Connor on 5/4/2011) (trt) (Entered: 05/04/2011)
05/03/2011	<u>171</u>	Proposed Jury Charge filed by Lighting Ballast Control LLC. (Skeels, David) (Entered: 05/03/2011)
05/03/2011	<u>170</u>	Proposed Jury Instructions filed by Lighting Ballast Control LLC. (Skeels, David) (Entered: 05/03/2011)
05/02/2011	<u>169</u>	(Case Participants) Sealed Response to Plaintiff's Motion in Limine [ECF Dkt. No. 154] (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Appendix) (Sterling, Deborah) (Entered: 05/02/2011)
05/02/2011	<u>168</u>	(Case Participants) Plaintiff Lighting Ballast Control's Response to Defendant Universal Lighting Technologies, Inc.'s Omnibus Motion in Limine (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Attachments: # <u>1</u> Exhibit(s) 1) (Skeels, David) (Entered: 05/02/2011)
04/29/2011	<u>167</u>	ELECTRONIC ORDER granting <u>166</u> Motion for Leave to File. (Ordered by Judge Reed C O'Connor on 4/29/2011)(Judge Reed C O'Connor) (Entered: 04/29/2011)
04/29/2011	<u>166</u>	Joint MOTION for Leave to File Final Agreed Charge filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Suder, Jonathan) (Entered: 04/29/2011)
04/29/2011	<u>165</u>	Proposed Jury Instructions filed by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 04/29/2011)
04/29/2011	<u>164</u>	Proposed Jury Charge filed by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 04/29/2011)
04/26/2011	<u>163</u>	<i>Joint</i> SETTLEMENT CONFERENCE REPORT filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Suder, Jonathan) (Entered: 04/26/2011)

04/26/2011	<u>162</u>	TRIAL SCHEDULING ORDER. Jury Trial set for 6/6/2011 10:00 AM in US Courthouse, Courtroom 222, 1000 Lamar Street, Wichita Falls, TX 76301-3431 before Judge Reed C O'Connor. (Ordered by Judge Reed C O'Connor on 4/26/2011) (trt) (Entered: 04/26/2011)
04/25/2011	<u>161</u>	OBJECTION filed by Universal Lighting Technologies, Inc. re: <u>147</u> Pretrial Disclosures (Sterling, Deborah) (Entered: 04/25/2011)
04/25/2011	<u>160</u>	Proposed Voir Dire by Universal Lighting Technologies, Inc.. (Sterling, Deborah) (Entered: 04/25/2011)
04/25/2011	<u>159</u>	(Case Participants) Sealed Pretrial Disclosures under Federal Rule of Civil Procedure 26(a)(3)(A)-(B) (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Exhibit(s)) (Sterling, Deborah) (Entered: 04/25/2011)
04/25/2011	<u>158</u>	(Case Participants) Omnibus Motion in Limine (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Appendix) (Sterling, Deborah) . (Entered: 04/25/2011)
04/25/2011	<u>157</u>	Exhibit List by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 04/25/2011)
04/25/2011	<u>156</u>	Witness List by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 04/25/2011)
04/25/2011	<u>155</u>	Proposed Voir Dire by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 04/25/2011)
04/25/2011	<u>154</u>	MOTION in Limine filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 04/25/2011)
04/25/2011	<u>153</u>	Designation of Deposition by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 04/25/2011)
04/25/2011	<u>152</u>	OBJECTION filed by Lighting Ballast Control LLC re: <u>149</u> Sealed and/or Ex Parte Document (Suder, Jonathan) (Entered: 04/25/2011)
04/22/2011	<u>151</u>	ORDER granting ECF No. <u>150</u> Joint Motion to Extend Time. See Order. (Ordered by Judge Reed C O'Connor on 4/22/2011) (chmb) (acc) (Entered: 04/22/2011)
04/21/2011	<u>150</u>	Joint MOTION to Extend Time of Certain Deadlines in Final Scheduling Order filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Skeels, David) (Entered: 04/21/2011)
04/08/2011	<u>149</u>	(Case Participants) Defendant Universal Lighting Technologies, Inc. Rule 26(a)(3)(A)-(B) Disclosures (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Exhibit(s)) (Sterling, Deborah) (Entered: 04/08/2011)
04/08/2011	<u>148</u>	(Case Participants) Defendant's Reply in Support of Motion to Strike, Limit, or Exclude Certain Expert Testimony (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc.

		(Attachments: # <u>1</u> Appendix to Reply Brief) (Sterling, Deborah) (Entered: 04/08/2011)
04/08/2011	<u>147</u>	<i>Fed.R.Civ.P. 26(a)(3)(A) Pretrial Disclosures filed by Lighting Ballast Control LLC.</i> (Suder, Jonathan) (Entered: 04/08/2011)
03/30/2011	<u>146</u>	REPLY filed by Lighting Ballast Control LLC re: <u>130</u> MOTION to Strike <i>Expert Testimony of Dr. Michael Giesselmann and Expert Testimony of ULT's Seventeen "Non-Retained Experts"</i> (Suder, Jonathan) (Entered: 03/30/2011)
03/30/2011	<u>145</u>	REPLY filed by Lighting Ballast Control LLC re: <u>140</u> MOTION for Leave to File Sur-Reply in Opposition to Defendant's Motion for Summary Judgment (Suder, Jonathan) (Entered: 03/30/2011)
03/25/2011	<u>144</u>	(Case Participants) Response in Opposition to Plaintiff's <u>130</u> Motion to Strike Expert Testimony (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Appendix Part 1, # <u>2</u> Appendix Part 2, # <u>3</u> Appendix Part 3) (Sterling, Deborah) Modified on 3/28/2011 (jeh). (Entered: 03/25/2011)
03/25/2011	<u>143</u>	(Case Participants) Appendix to Plaintiff's <u>142</u> Response to Defendant's Motion to Strike, Limit, or Exclude Certain Expert Testimony (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Suder, Jonathan) Modified on 3/28/2011 (jeh). (Entered: 03/25/2011)
03/25/2011	<u>142</u>	(Case Participants) Plaintiff's Response to Defendant's <u>132</u> Motion to Strike, Limit or Exclude Certain Expert Testimony, and Brief in Support (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Suder, Jonathan) Modified on 3/28/2011 (jeh). (Entered: 03/25/2011)
03/25/2011	<u>141</u>	RESPONSE filed by Universal Lighting Technologies, Inc. re: <u>140</u> Sealed Motion for Leave to File a Sur-Reply (Sterling, Deborah) (Entered: 03/25/2011)
03/21/2011	<u>140</u>	(Case Participants) MOTION for Leave to File Sur-Reply in Opposition to Defendant's Motion for Summary Judgment filed by Lighting Ballast Control LLC with Brief/Memorandum in Support. (Attachments: # <u>1</u> Exhibit(s) 1) (Skeels, David)...Sealed Per Protective Order, doc#65... Modified on 3/21/2011 (dld). (Entered: 03/21/2011)
03/16/2011	<u>139</u>	RESPONSE filed by Universal Lighting Technologies, Inc. re: <u>134</u> Response/Objection (Attachments: # <u>1</u> Declaration(s)) (Sterling, Deborah) (Entered: 03/16/2011)
03/16/2011	<u>138</u>	(Case Participants) Reply Brief in Support of Universal Lighting Technologies, Inc.'s <u>126</u> Motion for Summary Judgment or Partial Summary Judgment (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) Modified on 3/17/2011 (jeh). (Entered: 03/16/2011)

03/16/2011	<u>137</u>	(Case Participants) Objections to Evidence Filed in Support of Plaintiff's Response to Defendant's Motion for Summary Judgment, doc #136 (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Declaration(s), # <u>2</u> Exhibit(s), # <u>3</u> Exhibit(s)) (Sterling, Deborah) Modified on 3/17/2011 (jeh). (Entered: 03/16/2011)
03/11/2011	<u>136</u>	(Case Participants) [sealed] Appendix to Plaintiff's Response to Motion to Summary Judgment and Memorandum in Support Thereof (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Attachments: # <u>1</u> Additional Page(s) 41-85, # <u>2</u> Additional Page(s) 86-130, # <u>3</u> Additional Page(s) 131-175, # <u>4</u> Additional Page(s) 176-220, # <u>5</u> Additional Page(s) 221-265, # <u>6</u> Additional Page(s) 266-310, # <u>7</u> Additional Page(s) 311-355, # <u>8</u> Additional Page(s) 356-400, # <u>9</u> Additional Page(s) 401-445, # <u>10</u> Additional Page(s) 446-490, # <u>11</u> Additional Page(s) 491-535, # <u>12</u> Additional Page(s) 536-580, # <u>13</u> Additional Page(s) 581-625, # <u>14</u> Additional Page(s) 626-670, # <u>15</u> Additional Page(s) 671-715, # <u>16</u> Additional Page(s) 716-760, # <u>17</u> Additional Page(s) 761-805, # <u>18</u> Additional Page(s) 806-850, # <u>19</u> Additional Page(s) 851-858) (Suder, Jonathan) (Entered: 03/11/2011)
03/11/2011	<u>135</u>	(Case Participants) Plaintiff's Response to Motion for Summary Judgment and Memorandum in Support Thereof (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 03/11/2011)
03/11/2011	<u>134</u>	OBJECTION filed by Lighting Ballast Control LLC re: <u>126</u> MOTION for Summary Judgment or Partial Summary Judgment (Attachments: # <u>1</u> Exhibit(s) 1) (Suder, Jonathan) (Entered: 03/11/2011)
03/04/2011	<u>133</u>	(Case Participants) Sealed Brief in Support of Defendant Universal Lighting Technologies, Inc.'s Motion to Strike, Limit, or Exclude Certain Expert Testimony (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Appendix Part 1, # <u>2</u> Appendix Part 2, # <u>3</u> Appendix Part 3, # <u>4</u> Appendix Part 4, # <u>5</u> Appendix Part 5, # <u>6</u> Appendix Part 6, # <u>7</u> Appendix Part 7) (Sterling, Deborah) (Entered: 03/04/2011)
03/04/2011	<u>132</u>	MOTION to Strike Limit or Exclude Certain Expert Testimony filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) . (Entered: 03/04/2011)
03/04/2011	<u>131</u>	(Case Participants) Sealed Appendix in Support of Plaintiff's Motion to Strike Expert Testimony of Dr. Michael Giesselmann and Expert Testimony of ULT's Seventeen "Non-Retained Experts" and Memorandum in Support (Sealed pursuant to order dated 2/2/2010) filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 03/04/2011)
03/04/2011	<u>130</u>	MOTION to Strike Expert Testimony of Dr. Michael Giesselmann and Expert Testimony of ULT's Seventeen "Non-Retained Experts" filed by Lighting Ballast Control LLC with Brief/Memorandum in Support.

		(Skeels, David) (Entered: 03/04/2011)
02/26/2011	• 129	ELECTRONIC ORDER granting ECF No. 125 Application for Admission Pro Hac Vice of Diana Szego. Clerk shall deposit application fee to the Non-Appropriated Fund of this Court. If not already done, Applicant must register as an ECF User within 14 days (LR 5.1(f)). (Ordered by Judge Reed C O'Connor on 2/26/2011) (chmb) (acc) (Entered: 02/26/2011)
02/26/2011	• 128	ELECTRONIC ORDER granting ECF No. 124 Application for Admission Pro Hac Vice of T. Vann Pearce, Jr. Clerk shall deposit application fee to the Non-Appropriated Fund of this Court. If not already done, Applicant must register as an ECF User within 14 days (LR 5.1(f)). (Ordered by Judge Reed C O'Connor on 2/26/2011) (chmb) (acc) (Entered: 02/26/2011)
02/25/2011	• 127	(Case Participants) SEALED Brief in Support of Defendant Universal Lighting Technologies, Inc.'s Motion for Summary Judgment or Partial Summary Judgment (Sealed pursuant to order dated 2/2/2010) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Appendix Part 1, # <u>2</u> Appendix Part 2, # <u>3</u> Appendix Part 3, # <u>4</u> Appendix Part 4, # <u>5</u> Appendix Part 5) (Sterling, Deborah) (Entered: 02/25/2011)
02/25/2011	• 126	MOTION for Summary Judgment or Partial Summary Judgment filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 02/25/2011)
02/25/2011	• 125	Application for Admission Pro Hac Vice with Cert. of Good Standing for Attorney Diana Szego (Filing fee \$25; Receipt number 0539-3739801) filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 02/25/2011)
02/11/2011	• 124	Application for Admission Pro Hac Vice with Cert. of Good Standing for Attorney T. Vann Pearce, Jr. (Filing fee \$25; Receipt number 0539-3714635) filed by Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Proposed Order, # <u>2</u> Certificate of Good Standing) (Pearce, Timothy) (Entered: 02/11/2011)
02/08/2011	• 123	NOTICE of Rule 26(a)(2)(B) Disclosures filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 02/08/2011)
02/08/2011	• 122	NOTICE of Rule 26(a)(2)(B) Disclosures filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 02/08/2011)
02/01/2011	• 121	ORDER granting 115 UNOPPOSED MOTION TO BEGIN TRIAL NO EARLIER THAN MAY 9, 2011. Before the Court is Plaintiff's Unopposed Motion to Begin Trial no Earlier Than May 9, 2011, ECF No. 115. Based on the reasons articulated in Plaintiff's Motion, the Court finds that good cause exists for the granting of the Motion. Accordingly, it is hereby ORDERED that this case will remain on the Court's May 2011 jury trial docket, but that the trial will not begin before May 9, 2011. Signed on this 1st day of February, 2011. (Ordered by Judge Reed C O'Connor on 2/1/2011) (plp) (Entered: 02/02/2011)

01/31/2011	 120	ORDER granting 118 Motion to Extend Time. Motions due by 2/25/2011. Replies due by 3/16/2011. Responses due by 3/11/2011. See Order for further specifics. (Ordered by Judge Reed C O'Connor on 1/31/2011) (trt) (Entered: 01/31/2011)
01/28/2011	 119	NOTICE of Rule 26(a)(2)(C) Disclosures filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 01/28/2011)
01/28/2011	 118	Joint MOTION to Extend Time Dispositive Motion Deadline filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 01/28/2011)
01/25/2011	 117	NOTICE of Rule 26(a) Disclosures filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 01/25/2011)
01/24/2011	 116	NOTICE of Rule 26(a)(2) Disclosures filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 01/24/2011)
01/24/2011	 115	Unopposed MOTION To Begin Trial No Earlier Than May 9, 2011 filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 01/24/2011)
12/27/2010	 114	FINAL SCHEDULING ORDER Discovery due by 2/18/2011. Motions due by 2/18/2011. Pretrial Order due by 4/25/2011. Pretrial Materials due by 4/25/2011. Jury Trial set for 5/2/2011 10:00 AM in US Courthouse, Courtroom 222, 1000 Lamar Street, Wichita Falls, TX 76301-3431 before Judge Reed C O'Connor. See order for further specifics. (Ordered by Judge Reed C O'Connor on 12/27/2010) (plp) (Entered: 12/27/2010)
12/23/2010	 113	Proposal for contents of scheduling and discovery order <i>jointly filed</i> by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. (Sterling, Deborah) (Entered: 12/23/2010)
12/10/2010	 112	Meet & Confer Order: The parties must make a good faith effort to agree among themselves on these deadlines and file their Joint Report for Proposed Scheduling Order on or before Friday, December 24, 2010. The Court is vacating the current deadlines as a courtesy to the parties in the hope that they can come to a reasonable agreement on scheduling for the remainder of this case. See order for further specifics. (Ordered by Judge Reed C O'Connor on 12/10/2010) (plp) (Main Document 112 replaced on 12/10/2010) (plp). (Entered: 12/10/2010)
12/10/2010	 111	RESPONSE filed by Universal Lighting Technologies, Inc. re: 110 Emergency MOTION To Modify Amended Scheduling Order re 108 Scheduling Order,, (Sterling, Deborah) (Entered: 12/10/2010)
12/10/2010	 110	Emergency MOTION To Modify Amended Scheduling Order re 108 Scheduling Order,, filed by Lighting Ballast Control LLC with Brief/Memorandum in Support. (Skeels, David) (Entered: 12/10/2010)
12/06/2010	 109	STIPULATION OF DISMISSAL with Prejudice as to Defendant Philips Electronics North America Corporation by Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 12/06/2010)

12/02/2010		(Court only) ***Motion terminated: <u>100</u> Joint MOTION to Extend Time for Dispositive Motions filed by Universal Lighting Technologies, Inc., and Lighting Ballast Control LLC. This motion terminated by Scheduling Order <u>108</u> . (cab) (Entered: 12/06/2010)
12/02/2010	 <u>108</u>	AMENDED SCHEDULING ORDER Discovery due by 12/17/2010. Motions due by 1/7/2011. Pretrial Materials due by 3/25/2011. This case is set for jury trial on this Courts four-week docket beginning April 4, 2011 in US Courthouse, Courtroom 222, 1000 Lamar Street, Wichita Falls, TX 76301-3431 before Judge Reed C O'Connor. Counsel and the parties shall be ready for trial on two days notice at any time during this four-week period. See order for further specifics. (Ordered by Judge Reed C O'Connor on 12/2/2010) (plp) (Entered: 12/03/2010)
12/02/2010	 <u>107</u>	Amended Memorandum Opinion and Order re: <u>102</u> Motion for Reconsideration filed by Lighting Ballast Control LLC. Vacating <u>101</u> Memorandum Opinion and Order. See Order for specifics. (Ordered by Judge Reed C O'Connor on 12/2/2010) (trt) (Entered: 12/02/2010)
10/29/2010	 <u>106</u>	ELECTRONIC ORDER: Pending the Court's resolution of Plaintiff's Motion for Reconsideration, ECF No. <u>102</u> , all pending deadlines are vacated. (Ordered by Judge Reed C O'Connor on 10/29/2010) (chmb) (acc) (Entered: 10/29/2010)
09/09/2010	 <u>105</u>	REPLY filed by Lighting Ballast Control LLC re: <u>102</u> MOTION for Reconsideration re <u>101</u> Memorandum Opinion and Order, <i>and Clarification, and Request for Expedited Hearing</i> (Skeels, David) (Entered: 09/09/2010)
09/07/2010	 <u>104</u>	RESPONSE AND OBJECTION filed by Universal Lighting Technologies, Inc. re: <u>102</u> MOTION for Reconsideration re <u>101</u> Memorandum Opinion and Order, <i>and Clarification, and Request for Expedited Hearing</i> (Attachments: # <u>1</u> Exhibit(s) A and B) (Sterling, Deborah) (Entered: 09/07/2010)
08/31/2010	 <u>103</u>	ORDER: Before the Court is Plaintiff's Motion for Reconsideration, ECF No. <u>102</u> . The Court hereby ORDERS Defendant to file its Response on or before 09/07/2010 at 12:00 PM. Plaintiff may file a Reply so long as it is filed on or before 09/09/2010 at 12:00 PM. See Order. (Ordered by Judge Reed C O'Connor on 8/31/2010) (chmb) (acc) (Entered: 08/31/2010)
08/30/2010	 <u>102</u>	MOTION for Reconsideration re <u>101</u> Memorandum Opinion and Order, <i>and Clarification, and Request for Expedited Hearing</i> filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 08/30/2010)
08/19/2010	 <u>101</u>	***VACATED PER <u>107</u> Amended Memorandum Opinion and Order*** Memorandum Opinion and Order. The Court has construed the disputed claim terms after reviewing the briefs and responses of the parties, the applicable law, and where appropriate, any extrinsic evidence submitted by the parties. See Order for specifics. (Ordered by Judge Reed C O'Connor on 8/19/2010) (ttm) Modified on 12/2/2010 (trt). (Entered:

		08/19/2010)
08/19/2010	100	Joint MOTION to Extend Time for Dispositive Motions filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 08/19/2010)
07/28/2010	99	NOTICE <i>of Discovery Extension</i> filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 07/28/2010)
07/22/2010	98	NOTICE <i>Supplemental Notice of Settlement</i> filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 07/22/2010)
06/29/2010	97	NOTICE <i>of Settlement</i> filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 06/29/2010)
06/11/2010	96	NOTICE <i>of Filing of Claim Construction Chart</i> re: 49 Scheduling Order, filed by Lighting Ballast Control LLC (Attachments: # 1 Exhibit(s) A) (Skeels, David) (Entered: 06/11/2010)
06/03/2010	95	ELECTRONIC ORDER granting 94 Motion for Extension of Time to File Claim Construction Chart. The June 3, 2010 deadline to file a Claim Construction Chart, as imposed by the October 16, 2009 Scheduling Order, is hereby extended to June 11, 2010. (Ordered by Judge Reed C O'Connor on 6/3/2010) (chmb)(cny) (Entered: 06/03/2010)
06/03/2010	94	Unopposed MOTION for Extension of Time to File Claim Construction Chart filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 06/03/2010)
05/24/2010	93	Alternative Dispute Resolution Summary filed by Christopher Nolland. Attorneys in Attendance: Jonathan Suder, David Skeels, Steven Routh, Diana Szego, Brenda Cubbage, Vincent Kovalick. Prv Fee: \$ 10,000.00. Outcome of ADR: Settled in part, as a result of ADR. (Nolland, Christopher) (Entered: 05/24/2010)
05/21/2010	92	NOTICE <i>Mediation Report for Plaintiff Lighting Ballast Control LLC and Philips Electronics North America Corporation</i> filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 05/21/2010)
05/21/2010	91	Alternative Dispute Resolution Summary filed by Lighting Ballast Control LLC, Universal Lighting Technologies, Inc.. Attorneys in Attendance: Jonathan Suder, Steven Routh, Brenda Cubbage, and Diana Szego. Prv Fee: \$ \$5,000.00. Outcome of ADR: Continuing to work with parties to reach a settlement. (Sterling, Deborah) (Entered: 05/21/2010)
05/20/2010	90	Appendix in Support filed by Philips Electronics North America Corporation, Universal Lighting Technologies, Inc. re 89 Response/Objection (Attachments: # 1 Exhibit(s) to Appendix) (Sterling, Deborah) (Entered: 05/20/2010)
05/20/2010	89	RESPONSE filed by Philips Electronics North America Corporation, Universal Lighting Technologies, Inc. re: 84 Brief/Memorandum in Support of Motion, (Sterling, Deborah) (Entered: 05/20/2010)

05/20/2010	● 88	Appendix in Support filed by Lighting Ballast Control LLC re <u>87</u> Response/Objection (Suder, Jonathan) (Entered: 05/20/2010)
05/20/2010	● 87	RESPONSE filed by Lighting Ballast Control LLC re: <u>85</u> Sealed Document (Suder, Jonathan) (Entered: 05/20/2010)
05/06/2010	● 86	(Case Participants) *SEALED* Appendix to Joint Opening Brief on Claim Construction pursuant to order dated 2/2/2010 filed by Philips Electronics North America Corporation, Universal Lighting Technologies, Inc. (Attachments: # <u>1</u> Exhibit(s) A, B, B1, B2 part 1, # <u>2</u> Exhibit(s) B2 part 2, B3, B4 B5) (Sterling, Deborah) (Entered: 05/06/2010)
05/06/2010	● 85	(Case Participants) *SEALED* Joint Opening Brief on Claim Construction pursuant to order dated 2/2/2010 filed by Philips Electronics North America Corporation, Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 05/06/2010)
05/06/2010	● 84	Brief/Memorandum in Support filed by Lighting Ballast Control LLC re <u>49</u> Scheduling Order, <i>Plaintiff's Opening Brief on Claim Construction</i> (Attachments: # <u>1</u> Exhibit(s) 1, # <u>2</u> Exhibit(s) 2, # <u>3</u> Exhibit(s) 2A, # <u>4</u> Exhibit(s) 2B, # <u>5</u> Exhibit(s) 2C, # <u>6</u> Exhibit(s) 2D, # <u>7</u> Exhibit(s) 3, # <u>8</u> Exhibit(s) 4) (Suder, Jonathan) (Entered: 05/06/2010)
05/03/2010	● 83	ELECTRONIC ORDER granting <u>82</u> Motion to Withdraw as Attorney. Attorney Jeffrey L Cureton terminated. (Ordered by Judge Reed C O'Connor on 5/3/2010) (chmb)(cny) (Entered: 05/03/2010)
04/30/2010	● 82	Unopposed MOTION to Withdraw as Attorney <i>Jeffrey L. Cureton</i> filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 04/30/2010)
04/05/2010	● 81	AFFIDAVIT of Service for Subpoena to Testify at Deposition served on Osram Sylvania on 3/12/2010. (Sterling, Deborah) (Entered: 04/05/2010)
04/05/2010	● 80	AFFIDAVIT of Service for Subpoena To Testify at Deposition served on Motorola, Inc. on 3/12/2010. (Sterling, Deborah) (Entered: 04/05/2010)
03/26/2010	● 79	NOTICE OF FILING OF AMENDED JOINT CLAIM CONSTRUCTION AND PREHEARING STATEMENT re: <u>78</u> Notice (Other) filed by Lighting Ballast Control LLC (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Exhibit B) (Skeels, David) (Entered: 03/26/2010)
03/22/2010	● 78	NOTICE of filing of Joint Claim Construction and Prehearing Statement filed by Lighting Ballast Control LLC (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Exhibit B) (Skeels, David) (Entered: 03/22/2010)
03/15/2010	● 77	ORDER granting <u>76</u> Motion to Extend Time. Having considered the Motion, and finding that good cause exists and the relief sought is justified, it is hereby ORDERED that the parties file their Joint Claim Construction and Prehearing Statement on March 22, 2010. (Ordered by Judge Reed C O'Connor on 3/15/2010) (ttm) (Entered: 03/15/2010)
03/15/2010	● 76	Joint MOTION to Extend Time to File Joint Claim Construction and Prehearing Statement filed by Lighting Ballast Control LLC (Attachments: # <u>1</u> Text of Proposed Order) (Skeels, David) (Entered:

		03/15/2010)
03/12/2010	• 75	NOTICE of Subpoena Duces Tecum to Osram Sylvania Inc. filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 03/12/2010)
03/12/2010	• 74	NOTICE of Subpoena Duces Tecum to Motorola, Inc. filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 03/12/2010)
03/12/2010	• 73	NOTICE of Subpoena Duces Tecum to Andrzej Bobel filed by Philips Electronics North America Corporation, Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 03/12/2010)
02/19/2010	• 72	ANSWER to Counterclaim filed by Lighting Ballast Control LLC. Related document: 70 Amended Answer to Complaint, Counterclaim (Skeels, David) (Entered: 02/19/2010)
02/11/2010	• 71	NOTICE of Compliance with PR 4-2 filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 02/11/2010)
02/08/2010	• 70	AMENDED ANSWER to 1 Complaint, with Jury Demand filed by Universal Lighting Technologies, Inc., COUNTERCLAIM against Lighting Ballast Control LLC filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 02/08/2010)
02/08/2010	• 69	ORDER GRANTING UNIVERSAL LIGHTING TECHNOLOGIES, INC.S UNOPPOSED MOTION FOR LEAVE TO AMEND ITS ANSWER, AFFIRMATIVE DEFENSES, AND COUNTERCLAIM granting 66 Motion for Leave to File. ULT shall file its Amended Answer, Affirmative Defenses and Counterclaim on the docket no later than 5:00 p.m. February 10, 2010. (Ordered by Judge Reed C O'Connor on 2/8/2010) (ttm) (Entered: 02/08/2010)
02/05/2010	• 68	NOTICE of Compliance with P.R. 4-2 filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 02/05/2010)
02/05/2010	• 67	Brief/Memorandum in Support filed by Universal Lighting Technologies, Inc. re 66 Unopposed MOTION for Leave to File Amended Answer (Sterling, Deborah) (Entered: 02/05/2010)
02/05/2010	• 66	Unopposed MOTION for Leave to File Amended Answer filed by Universal Lighting Technologies, Inc. (Attachments: # 1 Exhibit A) (Sterling, Deborah) (Entered: 02/05/2010)
02/02/2010	•	(Court only) *** Copies of 64 Order and 65 Order mailed to Vincent P Kovalick, Finnegan Henderson, Farabow Garrett & Dunner LLP, 901 New York Ave NW, Washington, DC 20001 (ttm) (Entered: 02/02/2010)
02/02/2010	• 65	STIPULATED PROTECTIVE ORDER. See Order for specifics. (Ordered by Judge Reed C O'Connor on 2/2/2010) (ttm) (Entered: 02/02/2010)
02/02/2010	• 64	ORDER granting 63 Motion for Protective Order (Ordered by Judge Reed C O'Connor on 2/2/2010) (ttm) (Entered: 02/02/2010)

02/01/2010	<u>63</u>	Joint MOTION for Protective Order filed by Philips Electronics North America Corporation, Universal Lighting Technologies, Inc., Lighting Ballast Control LLC (Attachments: # <u>1</u> Exhibit A) (Sterling, Deborah) (Entered: 02/01/2010)
02/01/2010	<u>62</u>	ORDER granting <u>62</u> Application for Admission Pro Hac Vice. Clerk shall deposit application fee to the Non-Appropriated Fund of this Court. If not already done, Applicant must register as an ECF User within 14 days (LR 5.1(f)). (Ordered by Judge Reed C O'Connor on 2/1/2010) (fam) (Entered: 02/01/2010)
01/29/2010	<u>62</u>	Application for Admission Pro Hac Vice of Attorney John Mulcahy (Filing fee \$25; Receipt number 0539000000003050638) filed by Philips Electronics North America Corporation. The fee paid (filing fee \$25) in document #26 is applied to this corrected PHV form per electronic order entered 1/27/2010. (ttm) (Entered: 01/29/2010)
01/27/2010	<u>62</u>	ORDER denying <u>56</u> Application for Admission Pro Hac Vice. An attorney seeking pro hac vice admission must apply for admission on an approved form. See LR 83.9(b). The fee paid (filing fee \$25) will be applied to the corrected PHV form. The form is available on the Court's web site at http://www.txnd.uscourts.gov/pdf/atty_handbook/PROHACVC.pdf . (Ordered by Judge Reed C O'Connor on 1/27/2010) (fam) (Entered: 01/27/2010)
01/19/2010	<u>61</u>	(Court only) *** Mailed copies of <u>61</u> Order to parties not noticed electronically: John Mulcahy, Finnegan Henderson Farabow Garrett & Dunner LLP, Two Freedom Square, 11955 Freedom Dr, Reston, VA 20190-5673 and Vincent P Kovalick, Finnegan Henderson Farabow Garrett & Dunner LLP, 901 New York Ave NW, Washington, DC 20001 (ttm) (Entered: 01/19/2010)
01/15/2010	<u>60</u>	NOTICE of Disclosures Under Northern District of Texas Misc. Order 62, Paragraph 4-1 filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 01/15/2010)
01/14/2010	<u>61</u>	ORDER:, Application and Order for Admission Pro Hac Vice by Vincent P Kovalick for Philips Electronics North America Corporation (Ordered by Judge Reed C O'Connor on 1/14/2010) (ttm) (Entered: 01/19/2010)
01/12/2010	<u>59</u>	ORDER granting <u>52</u> Motion to proceed without local counsel. The Court reminds counsel of the duty to abide by all local rules of this court and the standards of litigation conduct set forth in Dondi Properties Corporation v. Commerce Savings and Loan Association, 121 F.R.D. 284 (N.D. Tex. 1988). The Court further advises that if proceeding without local counsel disrupts this litigation or otherwise results in failure to comply with the rules of this court, Defendant will be required to immediately obtain local counsel. (Ordered by Judge Reed C O'Connor on 1/12/2010) (ttm) (Entered: 01/13/2010)
01/12/2010	<u>58</u>	ORDER ON JOINT MOTION FOR EXTENSION OF TIME FOR DESIGNATION OF EXPERT WITNESSES AND WITNESS REPORTS

		granting <u>55</u> Motion to Extend Time. See order for specifics. (Ordered by Judge Reed C O'Connor on 1/12/2010) (ttm) (Entered: 01/12/2010)
12/28/2009	• <u>50</u>	(Court only) ***Party Fulham Co., Inc. terminated *** See STIPULATION OF DISMISSAL by Lighting Ballast Control LLC. (aps) (Entered: 12/28/2009)
12/23/2009	• <u>57</u>	STIPULATION OF DISMISSAL <i>as to Defendant Fulham Co., Inc.</i> by Lighting Ballast Control LLC. (Skeels, David) (Entered: 12/23/2009)
12/22/2009	• <u>56</u>	Application for Admission Pro Hac Vice of Attorney John Mulcahy (Filing fee \$25; Receipt number 05390000000003050638) filed by Philips Electronics North America Corporation (Yarbrough, Trey) (Entered: 12/22/2009)
12/21/2009	• <u>55</u>	Joint MOTION to Extend Time for Designation of Expert Witnesses filed by Philips Electronics North America Corporation, Advance Transformer Co., Fulham Co., Inc., Universal Lighting Technologies, Inc., Lighting Ballast Control LLC, General Electric Company (Skeels, David) (Entered: 12/21/2009)
12/15/2009	• <u>54</u>	NOTICE <i>of Compliance Regarding Service of Invalidity Contentions and Documents</i> filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 12/15/2009)
12/14/2009	• <u>53</u>	NOTICE <i>of Compliance on Invalidity Contentions</i> filed by Philips Electronics North America Corporation (Yarbrough, Trey) (Entered: 12/14/2009)
11/25/2009	• <u>52</u>	Unopposed MOTION For Leave to Appear Without Local Counsel as Defined Under L.R. 83.10(a) filed by Philips Electronics North America Corporation (Yarbrough, Trey) (Entered: 11/25/2009)
10/26/2009	• <u>51</u>	ORDER granting <u>45</u> Motion to Substitute Attorney. (Ordered by Judge Reed C O'Connor on 10/26/09) (ttm) (Entered: 10/26/2009)
10/26/2009	• <u>50</u>	ORDER granting <u>48</u> Motion to Substitute Party. Philips Electronics North America Corporation, Defendant and Philips Electronics North America Corporation, Counter-Defendant added. Advance Transformer Co., Defendant and Advance Transformer Co., Counter-Defendant terminated (Ordered by Judge Reed C O'Connor on 10/26/09) (ttm) (Entered: 10/26/2009)
10/16/2009	• <u>49</u>	SCEDULING ORDER: Amended Pleadings due by 2/5/2010. Motions due by 9/6/2010. Discovery due by 8/6/2010. Pretrial Materials due by 12/20/2010. This case is set for jury trial on this Courts four-week docket beginning January 4, 2011. Counsel and the parties shall be ready for trial on two days notice at any time during this four-week period. *** See order for further specifics *** (Ordered by Judge Reed C O'Connor on 10/16/2009) (aps) (Entered: 10/16/2009)
09/23/2009	• <u>48</u>	Unopposed MOTION to Substitute Party filed by Lighting Ballast Control LLC. Party PHILIPS ELECTRONICS NORTH AMERICA

		CORPORATION added. (Skeels, David) (Entered: 09/23/2009)
09/23/2009	④ 47	NOTICE of <i>Initial Disclosures</i> filed by Advance Transformer Co. (Yarbrough, Trey) (Entered: 09/23/2009)
09/15/2009	④ 46	NOTICE of <i>Disclosures Pursuant to P.R. 3-1 and 3-2</i> filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 09/15/2009)
09/14/2009	④ 45	Unopposed MOTION to Substitute Attorney. Added attorney Sten Jensen and Deborah L Sterling for Universal Lighting Technologies, Inc., John R Inge and Deborah L Sterling for Universal Lighting Technologies, Inc.. Motion filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 09/14/2009)
09/02/2009	④ 44	NOTICE of <i>Initial Disclosures</i> filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 09/02/2009)
09/02/2009	④ 43	NOTICE of <i>Initial Disclosures Pursuant to Fed.R.Civ.P. 26</i> filed by Fulham Co., Inc. (Thames, E) (Entered: 09/02/2009)
08/28/2009	④ 42	Joint STATUS REPORT Regarding Contents of Scheduling Order filed by Advance Transformer Co., Fulham Co., Inc., Universal Lighting Technologies, Inc., Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 08/28/2009)
08/28/2009	④ 41	NOTICE of Rule 26(a)(1) <i>Initial Disclosures</i> filed by Lighting Ballast Control LLC (Suder, Jonathan) (Entered: 08/28/2009)
08/13/2009	④ 40	Application and Order for Admission Pro Hac Vice by Steve Routh for Universal Lighting Technologies, Inc. (Ordered by Judge Reed C O'Connor on 8/12/09) (dnc) (Entered: 08/14/2009)
08/13/2009	④ 39	Application and Order for Admission Pro Hac Vice by Sten Jensen for Universal Lighting Technologies, Inc. (Ordered by Judge Reed C O'Connor on 8/12/09) (dnc) (Entered: 08/14/2009)
08/13/2009	④ 38	Application and Order for Admission Pro Hac Vice by John R Inge for Universal Lighting Technologies, Inc. (Ordered by Judge Reed C O'Connor on 8/12/09) (dnc) (Entered: 08/14/2009)
08/04/2009	④	(Court only) ***Party General Electric Company terminated and Attorney(s) Jeffrey L Cureton and David A Skeels terminated. (ttm) (Entered: 08/05/2009)
08/04/2009	④ 37	NOTICE of <i>Dismissal with Prejudice as to Defendant General Electric Company</i> filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 08/04/2009)
07/14/2009	④ 36	ORDER: Plaintiff and Defendant General Electric Company are therefore directed to file the appropriate dismissal papers (a stipulation of dismissal under FED. R. CIV. P. 41(a)(1)(A)(i), or an agreed motion to dismiss with corresponding proposed order) with the Clerks Office no later than 5:00 p.m. on Thursday, August 13, 2009. If a stipulation of dismissal is not filed by August 13, 2009 and further action is necessary or desirable with

		respect to Defendant General Electric Company, the parties should immediately file a Joint Status Report with this Court. (Ordered by Judge Reed C O'Connor on 7/14/09) (ttm) (Entered: 07/15/2009)
07/14/2009	35	ORDER REQUIRING SCHEDULING CONFERENCE AND REPORT FOR CONTENTS OF SCHEDULING ORDER Proposed Scheduling Order due by 8/28/2009. See order for further specifics. (Ordered by Judge Reed C O'Connor on 7/14/09) (ttm) (Entered: 07/14/2009)
07/13/2009	34	NOTICE of Settlement with Defendant General Electric Company filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 07/13/2009)
06/29/2009	33	(Court only) *** Added attorney David Skeels for Defendant General Electric. Regenerated NEF for <u>33</u> Order to David Skeels. All receipts were regenerated successfully. (ttm) (Entered: 06/30/2009)
06/29/2009	33	ORDER ON UNOPPOSED MOTION FOR EXTENSION OF TIME FOR DEFENDANT GENERAL ELECTRIC COMPANY TO ANSWER, MOVE OR OTHERWISE RESPOND TO PLAINTIFFS ORIGINAL COMPLAINT granting <u>32</u> Motion for Extension of Time to File Answer re <u>32</u> Unopposed Motion for Extension of Time to File Answer for <i>Defendant General Electric Company</i> General Electric Company answer due 7/10/2009. (Ordered by Judge Reed C O'Connor on 6/29/09) (ttm) (Entered: 06/30/2009)
06/26/2009	32	Unopposed Motion for Extension of Time to File Answer for <i>Defendant General Electric Company</i> filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 06/26/2009)
06/22/2009	31	CERTIFICATE OF INTERESTED PERSONS/DISCLOSURE STATEMENT by Fulham Co., Inc.. (Thames, E) (Entered: 06/22/2009)
06/22/2009	30	ANSWER to <u>1</u> Complaint, with Jury Demand filed by Fulham Co., Inc. (Thames, E) (Entered: 06/22/2009)
06/12/2009	29	<i>Plaintiff's Answer to Defendant Advance Transformer Co.'s Counterclaims</i> filed by Lighting Ballast Control LLC. Related document: <u>22</u> Answer to Counterclaim (Skeels, David) Modified on 6/17/2009 (ttm). (Entered: 06/12/2009)
06/03/2009	3	(Court only) ***Motions terminated per Order <u>28</u> : <u>27</u> Unopposed MOTION to Extend Time to Answer, Move or Otherwise Respond to Plaintiff's Original Complaint Motion for Extension of Time to File Answer filed by Lighting Ballast Control LLC. (aps) (Entered: 07/06/2009)
06/03/2009	28	ORDER granting <u>27</u> Motion to Extend Time. It is, therefore, ORDERED that Defendant General Electric Company shall answer, move, or otherwise respond to Plaintiffs Original Complaint on or before June 26, 2009. (Ordered by Judge Reed C O'Connor on 6/3/2009) (aps) (Entered: 06/03/2009)

06/02/2009	<u>27</u>	Unopposed MOTION to Extend Time to Answer, Move or Otherwise Respond to Plaintiff's Original Complaint(), Motion for Extension of Time to File Answer filed by Lighting Ballast Control LLC (Skeels, David) (Entered: 06/02/2009)
05/28/2009	<u>26</u>	ORDER granting <u>23</u> Motion for Extension of Time to File Answer Fulham Co., Inc. answer due 6/22/2009. (Ordered by Judge Reed C O'Connor on 5/28/09) (ttm) (Entered: 05/28/2009)
05/26/2009	<u>25</u>	SUMMONS Returned Executed as to General Electric Company ; served on 3/2/2009. (Suder, Jonathan) (Entered: 05/26/2009)
05/22/2009	<u>24</u>	ORDER: Accordingly, the Court orders that Plaintiff shall complete service upon Defendant General Electric Company by June 1, 2009, and file proof of such service within three days of completing service. (Ordered by Judge Reed C O'Connor on 5/22/2009) (aps) Modified on 5/26/2009 (ttm). (Entered: 05/22/2009)
05/22/2009	<u>23</u>	Second Motion for Extension of Time to File Answer (<i>Unopposed</i>) filed by Fulham Co., Inc. (Attachments: # <u>1</u> Text of Proposed Order - copy emailed to Judge O'Connor) (Thames, E) (Entered: 05/22/2009)
05/20/2009	<u>22</u>	ANSWER to <u>1</u> Complaint, with Jury Demand filed by Advance Transformer Co., COUNTERCLAIM against Lighting Ballast Control LLC filed by Advance Transformer Co. (Yarbrough, Trey) (Entered: 05/20/2009)
04/24/2009	<u>21</u>	Application and Order for Admission Pro Hac Vice by John F Triggs for Universal Lighting Technologies, Inc. (Ordered by Judge Reed C O'Connor on 4/24/09) (dnc) (Entered: 04/27/2009)
04/24/2009	<u>20</u>	Application and Order for Admission Pro Hac Vice by Gary L Montle for Universal Lighting Technologies, Inc. (Ordered by Judge Reed C O'Connor on 4/24/09) (dnc) (Entered: 04/27/2009)
04/24/2009	<u>19</u>	Application and Order for Admission Pro Hac Vice by Mark J Patterson for Universal Lighting Technologies, Inc. (Ordered by Judge Reed C O'Connor on 4/24/09) (dnc) (Entered: 04/27/2009)
04/24/2009	<u>18</u>	ORDER granting <u>16</u> Motion for Extension of Time to File Answer Fulham Co., Inc. answer due 5/22/2009. (Ordered by Judge Reed C O'Connor on 4/24/2009) (aps) (Entered: 04/24/2009)
04/23/2009	<u>17</u>	ANSWER to Counterclaim filed by Lighting Ballast Control LLC. Related document: <u>10</u> Answer to Complaint, Counterclaim (Suder, Jonathan) (Entered: 04/23/2009)
04/22/2009	<u>16</u>	Unopposed Motion for Extension of Time to File Answer filed by Fulham Co., Inc. (Attachments: # <u>1</u> Text of Proposed Order) (Thames, E) (Entered: 04/22/2009)
04/22/2009	<u>15</u>	NOTICE of Attorney Appearance by E Glenn Thames on behalf of Fulham Co., Inc.. (Thames, E) (Entered: 04/22/2009)

04/21/2009	<u>14</u>	ORDER granting <u>13</u> Motion for Extension of Time to File Answer. (Ordered by Judge Reed C O'Connor on 4/21/09) (ttm) (Entered: 04/22/2009)
04/20/2009	<u>13</u>	Unopposed Motion for Extension of Time to File Answer <i>Defendant's Unopposed Second Motion for Extension of Time in Which to Answer, Move or Otherwise Respond to Plaintiff's Original Complaint</i> filed by Advance Transformer Co. (Yarbrough, Trey) (Entered: 04/20/2009)
03/30/2009	<u>12</u>	CERTIFICATE OF INTERESTED PERSONS/DISCLOSURE STATEMENT by Advance Transformer Co. identifying Corporate Parent/Other Affiliate Philips Electronics North America Corporation for Advance Transformer Co.. (Yarbrough, Trey) (Entered: 03/30/2009)
03/27/2009	<u>11</u>	CERTIFICATE OF INTERESTED PERSONS/DISCLOSURE STATEMENT by Universal Lighting Technologies, Inc.. (Sterling, Deborah) (Entered: 03/27/2009)
03/26/2009	<u>10</u>	ANSWER to <u>1</u> Complaint, filed by Universal Lighting Technologies, Inc., COUNTERCLAIM against Lighting Ballast Control LLC filed by Universal Lighting Technologies, Inc. (Sterling, Deborah) (Entered: 03/26/2009)
03/23/2009	<u>9</u>	ORDER granting <u>7</u> Motion for Extension of Time to File Answer re <u>7</u> Unopposed Motion for Extension of Time to File Answer Advance Transformer Co. answer due 4/20/2009. (Ordered by Judge Reed C O'Connor on 3/23/2009) (aps) (Entered: 03/23/2009)
03/20/2009	<u>8</u>	SUMMONS Returned Executed as to Universal Lighting Technologies, Inc. ; served on 2/28/2009. (Suder, Jonathan) (Entered: 03/20/2009)
03/19/2009	<u>7</u>	Unopposed Motion for Extension of Time to File Answer filed by Advance Transformer Co. (Yarbrough, Trey) (Entered: 03/19/2009)
03/19/2009	<u>6</u>	NOTICE of Attorney Appearance by Trey Yarbrough, III on behalf of Advance Transformer Co.. (Yarbrough, Trey) (Entered: 03/19/2009)
03/12/2009	<u>5</u>	NOTICE of Attorney Appearance by Jeffrey L Cureton on behalf of Lighting Ballast Control LLC. (Cureton, Jeffrey) (Entered: 03/12/2009)
02/24/2009	<u>4</u>	Summons Issued as to Advance Transformer Co., Fulham Co., Inc., General Electric Company, Universal Lighting Technologies, Inc. (ttm) (Entered: 02/24/2009)
02/24/2009	<u>1</u>	(Court only) ***Magistrate Judge Roach chosen by random selection to handle matters that may be referred in this case. (ttm) (Entered: 02/24/2009)
02/24/2009	<u>3</u>	NOTICE of Attorney Appearance by David A Skeels on behalf of Lighting Ballast Control LLC. (Skeels, David) (Entered: 02/24/2009)
02/24/2009	<u>2</u>	CERTIFICATE OF INTERESTED PERSONS/DISCLOSURE STATEMENT by Lighting Ballast Control LLC identifying Corporate Parent/Other Affiliate Acacia Patent Acquisition LLC, Corporate

		Parent/Other Affiliate Acacia Research Corporation for Lighting Ballast Control LLC. (Suder, Jonathan) (Entered: 02/24/2009)
02/24/2009	<u>1</u>	COMPLAINT WITH JURY DEMAND against all defendants filed by Lighting Ballast Control LLC. Clerk to issue summons(es). (Filing fee \$350; Receipt number 0539000000002602967) (Attachments: # <u>1</u> Exhibit A, # <u>2</u> Civil Cover Sheet) (Suder, Jonathan) (Entered: 02/24/2009)

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
WICHITA FALLS DIVISION

LIGHTING BALLAST CONTROL, §
LLC, §
Plaintiff, §
§
v. § CIVIL ACTION NO. 7:09-CV-29-O
§
PHILIPS ELECTRONICS NORTH §
AMERICA CORP., et al., §
§
Defendants. §

FINAL JUDGMENT

This Court has entered its Memorandum Opinion & Order **GRANTING** in part and **DENYING** in part ULT's Motion for Judgment as a Matter of Law, and **GRANTING** in part and **DENYING** in part LBC's Motion for Entry of Judgment

It is therefore **ORDERED** that the damages verdict of \$3,000,000.00 stands and represents a lump-sum royalty payment. It is further **ORDERED** that the Court awards prejudgment interest from the date of first infringement at the Texas statutory rate of 5%, compounded annually, amounting to \$1,543,479.20 in interest, bringing the total award to \$4,543,479.20. It is further **ORDERED** that the Court awards post-judgment interest from the date of judgment at the rate set by 28 U.S.C. § 1961 as of the date of judgment. It is further **ORDERED** that ULT's counter-claim for declaratory relief is hereby **DISMISSED** with prejudice pursuant to the verdict and the Court's Memorandum Opinion & Order. It is further **ORDERED** that all other relief not specifically referenced herein, and all pending motions, are hereby **DENIED** and **DISMISSED** pursuant to this Final Judgment.

SO ORDERED on this 25th day of August, 2011.

Certified a true copy of an instrument
on file in my office on 10/05/2011
Clerk, U.S. District Court,
Northern District of Texas
By Audra Lee Young Deputy

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
WICHITA FALLS DIVISION

LIGHTING BALLAST CONTROL,
LLC, §
§
Plaintiff, §
§
v. § CIVIL ACTION NO. 7:09-CV-29-O
§
PHILIPS ELECTRONICS NORTH
AMERICA CORP., et al., §
§
Defendants. §

MEMORANDUM OPINION & ORDER

Before the Court are Plaintiff Lighting Ballast Control, LLC's ("LBC") Motion for Judgment (ECF No. 244) filed on July 27, 2011, Defendant Universal Lighting Technologies, Inc.'s ("ULT") Response (ECF No. 249), LBC's Reply (ECF No. 250), ULT's Response and Objection to LBC's Reply (ECF No. 253), and LBC's Response to ULT's Objection (ECF No. 254). Also before the Court are Defendant ULT's Motion for Judgment as a Matter of Law (ECF No. 246), filed on June 27, 2011, Plaintiff LBC's Response (ECF No. 247), and ULT's Reply (ECF No. 252).

Having reviewed the motions and the applicable law, the Court finds that Defendant ULT's Motion should be and is hereby **GRANTED** in part and **DENIED** in part, and Plaintiff LBC's Motion should be and is hereby **GRANTED** in part and **DENIED** in part.

I. FACTUAL & PROCEDURAL BACKGROUND¹

¹ In considering a motion for judgment as a matter of law "the court must draw all reasonable inferences in favor of the non-moving party, and it may not make credibility determinations or weigh the evidence." *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000). "[T]he court should give credence to the evidence favoring the nonmovant as well as that 'evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that evidence comes from disinterested witnesses.'" *Id.* (quoting 9 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 2529 (2d ed. 1995)).

Certified a true copy of an instrument
on file in my office on 10/05/2011 1
Clerk, U.S. District Court,
Northern District of Texas
by Andrea Ruth Young Deputy

At issue in this case is United States Patent 5,436,529 (“‘529 Patent”) issued on July 25, 1995, and entitled “CONTROL AND PROTECTION CIRCUIT FOR ELECTRONIC BALLAST.” *See* Summ. J. Order 1, May 4, 2011, ECF No. 172. Plaintiff LBC holds the exclusive right to enforce the ‘529 Patent. *Id.* The ‘529 Patent covers a lighting ballast that powers fluorescent lamps with heatable filaments. *Id.* at 2. An electronic ballast practicing the ‘529 Patent operates in three different stages: (1) the initial start-up of the ballast, (2) the shut-down or sleep-mode of the ballast, and (3) the re-starting of the ballast after an inoperable lamp has been replaced. *Id.*

LBC instituted this action against ULT for infringement of the ‘529 Patent on February 24, 2009. *Id.* This case was tried to a jury on LBC’s contention that 46 of ULT’s lighting ballast products literally infringe claims 1, 2 and 5 of the ‘529 patent during the week of June 13, 2011. *See* ECF No. 226. After the close of LBC’s case, and again at the close of the evidence, ULT moved from entry of Judgment as a Matter of Law on the basis of non-infringement and invalidity pursuant to Rule 50(a) of the Federal Rules of Civil Procedure. The Court denied these motions.

On June 17, 2011, the jury returned a verdict finding: 1) all seven ULT product groups infringed claims 1, 2 and 5 of the ‘529 patent; 2) the asserted claims were not invalid as anticipated; 3) that there was no willful infringement; and 4) awarding “3,000,000.00” in damages to LBC. *See* Jury Charge 24-27, ECF No. 241. On June 27, 2011, in accord with the Court’s June 18, 2011 Order, LBC filed a motion for entry of judgment seeking: 1) an award of prejudgment and post-judgment interest and entry of the \$3,000,000.00 damages award; 2) a finding that this is an exceptional case under 35 U.S.C. § 285 on the basis of ULT’s litigation misconduct, justifying an award of attorney’s fees; 3) a permanent injunction barring ULT from continuing to infringe claims 1, 2 and 5 of the ‘529 patent; and 4) a declaration stating that the ‘529 patent is infringed and valid.

See LBC's Mot. Entry J.1, ECF No. 244.

On the same day, pursuant to the Court's June 18, 2011 Order and Rule 50 of the Federal Rules of Civil Procedure, ULT moved for Judgment as a Matter of Law on seven grounds: 1) the record does not contain legally sufficient evidence that the accused ULT products met the "output terminals connected to" limitation of claim 1 of the '529 patent; 2) the record does not contain legally sufficient evidence that the accused ULT products met the "control means" limitation of the '529 patent; 3) the record does not contain legally sufficient evidence that the accused products met the "direct current block means" limitation of the '529 patent; 4) the record does not contain legally sufficient evidence that the Linear Group 3 products infringe the '529 patent; 5) LBC failed to rebut the uncontested evidence that the '529 patent is invalid as anticipated by Japanese patent applications '799 and '997; 6) the record does not contain sufficient evidence to show compliance with the marking requirements of 35 U.S.C. § 284; and 7) based on the record evidence, the Court should clarify that the damages award represents a lump sum reasonable royalty award. *See* ULT's Mot. J. as a Matter of Law ("JMOL") 1-2, ECF No. 246.

II. LEGAL STANDARD

Rule 50 of the Federal Rules of Civil Procedure governs motions for judgment as a matter of law in jury trials. *See* Fed. R. Civ. P. 50; *see also Weisgram v. Marley Co.*, 528 U.S. 440, 448-49 (2000). A motion for judgment as a matter of law "is not a patent-law-specific issue, so regional circuit law applies." *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1248 (Fed. Cir. 2005). Rule 50(a) "authorizes the entry of judgment as a matter of law '[i]f a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.'" *See James v. Harris Cnty.*, 577 F.3d 612, 617

(5th Cir. 2009) (quoting Fed. R. Civ. P. 50(a)). “It allows the trial court to remove cases or issues from the jury’s consideration ‘when the facts are sufficiently clear that the law requires a particular result.’” *Weisgram*, 528 U.S. at 448 (quoting 9 Wright & Miller § 2521). “If the court does not grant a motion for judgment as a matter of law made under Rule 50(a), the court is considered to have submitted the action to the jury subject to the court’s later deciding the legal questions raised by the motion.” Fed. R. Civ. P. 50(b).

“[I]n entertaining a motion for judgment as a matter of law, the court should review all of the evidence in the record.” *Reeves*, 530 U.S. at 150. “In doing so, however, the court must draw all reasonable inferences in favor of the nonmoving party, and it may not make credibility determinations or weigh the evidence.” *Id.* (citing *Lytle v. Household Mfg., Inc.*, 494 U.S. 545, 554-55 (1990)). “Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Id.* at 150-51 (quoting *Anderson v. Liberty Lobby*, 477 U.S. 242, 255 (1986)). “Thus, although the court should review the record as a whole, it must disregard all evidence favorable to the moving party that the jury is not required to believe.” *Id.* at 151.

“A motion for judgment as a matter of law is appropriate if, after considering the evidence presented and viewing all reasonable inferences in the light most favorable to the nonmovant, the facts and inferences point so strongly in favor of the movant that a rational jury could not arrive at a contrary verdict.” *Murray v. Red Kap Indus., Inc.*, 124 F.3d 695, 697 (5th Cir. 1997). The Court must determine “whether ‘the facts and inferences point so strongly and overwhelmingly in favor of one party that the court concludes that reasonable jurors could not arrive at a contrary verdict.’”

Harris Corp., 417 F.3d at 1248 (quoting *Bellows v. Amoco Oil Co.*, 118 F.3d 268, 273 (5th Cir.

1997)). “If there is substantial evidence of such quality and weight that reasonable and fair-minded jurors might reach a different conclusion” then judgment as a matter of law is not appropriate. *Id.* “We must remember, however, that evidence sufficient to support a jury verdict must be *substantial* evidence.” *Guile v. United Sates*, 422 F.3d 221, 227 (5th Cir. 2005). “[T]he party opposing the motion must at least establish a conflict in substantial evidence on each essential element of their claim.” See *Anthony v. Chevron USA, Inc.*, 284 F.3d 578, 583 (5th Cir. 2002) (citing *Boeing Co. v. Shipman*, 411 F.2d 365, 374 (5th Cir. 1969) (en banc)). “The ‘standard of review with respect to a jury verdict is especially deferential.’” *Lubke v. City of Arlington*, 455 F.3d 489, 494 (5th Cir. 2006) (quoting *Brown v. Bryan Cnty.*, 219 F.3d 450, 456 (5th Cir. 2000)).

III. MOTION FOR JUDGMENT AS A MATTER OF LAW

The Court will first consider ULT’s Motion for Judgment as a Matter of Law, and then consider LBC’s Motion for Entry of Judgment.

ULT moves for judgment as a matter of law on seven grounds: 1) the record does not contain legally sufficient evidence that the accused ULT products meet the “output terminals connected to” limitation of claim 1 of the ‘529 patent; 2) the record does not contain legally sufficient evidence that the accused ULT products meet the “control means” limitation of the ‘529 patent; 3) the record does not contain legally sufficient evidence that the accused products meet the “direct current block means” limitation of the ‘529 patent; 4) the record does not contain legally sufficient evidence that the Linear Group 3 products infringe the ‘529 patent; 5) LBC failed to rebut the uncontested evidence that the ‘529 patent is invalid as anticipated by Japanese patent applications ‘799 and ‘997; 6) the record does not contain legally sufficient evidence that LBC complied with the marking requirements of 35 U.S.C. § 284; and 7) based on the record evidence, the Court should clarify that

the damages award represents a lump sum royalty payment. *See* ULT's JMOL 1-2, ECF No. 246.

A. "Connected to" Limitation

ULT contends that LBC failed to present legally sufficient evidence that the accused products meet the "output terminals connected to" limitation of claim 1 because the products are merely capable of being connected to a gas discharge lamp, but are not actually so connected. *See* Br. Supp. ULT's JMOL 1-3, ECF No. 246. ULT further contends that the verdict cannot be sustained on the basis of LBC's untimely attempt to re-construe "connected to" to mean "for connection to," because LBC waived their construction argument by failing to present it until after trial is incorrect as a matter of law. *Id.* at 3-8. LBC responds that ULT is the party proposing a new construction of the "connected to" language of claim 1, as both parties and the Court have consistently used the term "connected to" as interchangeable with the "for connection to" language of claim 18. *See* LBC's Resp. ULT's JMOL 2-11, ECF No. 247. LBC further argues that, regardless of ULT's waiver, ULT's proposed construction is incorrect as a matter of law. *Id.*

Preliminarily, both parties contend that their adversaries are proposing novel construction arguments. As such, both parties argue that their rivals have waived their proposed constructions. "Although waiver is generally a procedural issue, this court applies Federal Circuit precedent when determining whether a claim construction argument has been waived." *Lazare Kaplan Int'l, Inc. v. Photoscribe Techs. Inc.*, 628 F.3d 1359, 1376 (Fed. Cir. 2010) (citing *Harris Corp.*, 417 F.3d at 1250-51). "[L]itigants waive their right to present new claim construction disputes if they are raised for the first time after trial." *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 694 (Fed. Cir. 2008) (quoting *Conoco, Inc. v. Energy & Envtl. Int'l, L.C.*, 460 F.3d 1349, 1358-59 (Fed. Cir. 2006)).

ULT contends that at trial, and in its trial brief, LBC attempted to justify a finding of infringement by arguing for the first time that claim 1's "connected to" language should be construed to mean "for connection to," thus relieving LBC of the burden of proving that ULT actually connects its accused ballasts to lamps. *See* Br. Supp. ULT's JMOL 3, ECF No. 246. ULT contends that such a construction should have been presented to the Court rather than argued to the jury. *Id.* at 3-4. ULT further contends that LBC waived the right to proffer such a construction by not requesting a construction from the Court before the close of trial. *Id.* LBC contends that ULT's argument to the jury at trial that "connected to" and "for connection to" are not interchangeable represents a last-minute attempt to re-construe the term at odds with ULT's earlier claim construction position. LBC's Resp. ULT's JMOL 3-4, ECF No. 247. Accordingly, LBC contends that ULT waived any argument that the output terminals of the ballast must be physically connected to the lamp to meet the "connected to" language of claim 1. *Id.*

ULT's position rests on the intuitively enticing argument that because the "connected to" language of claim 1 was never "specially construed," such language retained its "plain meaning." *See* ULT's Reply 2-3, ECF No. 252. According to ULT, "arguing that words in a claim should be given a specialized or non-ordinary meaning is *proposing* a claim construction." *Id.* at 2. ULT's contention that no "specialized construction" of the term was necessary because they only sought to rely on the "plain meaning" of the language in claim 1 ignores the fact that in patent cases, "the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

In fact, both parties implicitly proposed new claim construction arguments during the course

of trial. ULT argued for the first time that the accused products did not meet claim 1 of the ‘529 patent because ULT did not literally connect their ballasts to lamps. Implicit in such argument to the jury was a construction holding that “connected to” required actual physical connection, a construction at odds with most of the parties’ prior briefing on the issue. Similarly, LBC argued to the jury through their expert Dr. Roberts that the term “connected to” in the ‘529 patent should be understood to mean “for connection to.” When LBC filed its trial brief regarding construction of the “connected to” language, ULT responded by arguing that *Cross Medical Products, Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293 (Fed. Cir. 2005), controlled and required the Court to construe the term “connected to” to require actual physical connection. Despite such clearly dueling constructions, neither party requested that the Court construe the term. Rather, both parties continued to argue their respective constructions to the jury, waiving their right to request such constructions through post-judgment motions.

Problematically, given the extant evidence regarding ULT’s patents and the construction arguments counsel for both ULT and LBC made to the jury, the jury was required to construe the term “connected to” to mean “for connection to” in order to find infringement because mere capability is insufficient to support a finding of infringement. See, e.g. *Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984, 994-95 (Fed. Cir. 2009). In order to directly infringe a patent “an accused infringer must either practice every element or control or direct the actions of another that practices the element in question.” *Centillion Data Sys., LLC v. Quest Commc’n Int’l, Inc.*, 631 F.3d 1279, 1282 (Fed. Cir. 2010). In *Ball Aerosol*, the “district court found infringement because the accused [device] ‘is reasonably capable of being configured in such a way that its holder [meets the relevant claim limitation].’” *Ball Aerosol*, 555 F.3d at 994. The Federal

Circuit reversed, holding that the plaintiff's "reliance on cases that found infringement by accused products that were reasonably capable of operating in an infringing manner is misplaced, since that line of cases is relevant only to claim language that specifies that the claim is drawn to capability." *Id.* (citing *Fantasy Sports Props., Inc. v. Sportsline.com, Inc.*, 287 F.3d 1108, 1117-18 (Fed. Cir. 2002)). *Ball Aerosol* teaches that unless the claim language is drawn to capability, a plaintiff must prove "'specific instances of direct infringement or that the accused device necessarily infringes the patent in suit.'" *Id.* (quoting *ACCO Brands, Inc. v. ABA Locks Mfg. Co.*, 501 F.3d 1307, 1313 (Fed. Cir. 2007)). In the instant case, the claim language "connected to" is not drawn to capability. Accordingly, the jury verdict cannot be upheld by resort to argument that the accused products are "reasonably capable" of being connected to gas discharge lamps. *Cf. id.* For the jury's verdict to be reasonable necessitates a finding that the jury appropriately construed the term "connected to" to mean "for connection to," because there is legally insufficient evidence that ULT actually connected the accused lighting ballasts to gas discharge lamps.

However, as ULT rightly notes, claim construction is a matter of law reserved for the Court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc) ("[T]he interpretation and construction of patent claims, which define the scope of the patentee's rights under the patent, is a matter of law exclusively for the court."). Therefore, despite the fact that both parties waived their respective claim construction arguments, the Court must now construe the "connected to" language of claim 1 in order to evaluate the verdict. *Id.*

Claim construction is the process of giving proper meaning to the claim language thereby defining the scope of the protection. *See Bell Commc 'ns Research, Inc. v. Vitalink Commc 'ns Corp.*, 55 F.3d 615, 619 (Fed. Cir. 1995) (internal citations omitted). Claim construction starts with the

language of the claim itself since a patent's claims define the invention to which the patentee is entitled the right to exclude. *Phillips*, 415 F.3d at 1312. “[T]he words of a claim ‘are generally given their ordinary and customary meaning.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1982)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* However, the patentee is free to define his own terms, so long as any special definition given to a term is clearly defined in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). “The claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Phillips*, 415 F.3d at 1314.

When construing disputed claim terms the court should look first to the intrinsic record of the patent, including the claims and the specification, to determine the meaning of words in the claims. *Nazomi Commc'ns, Inc. v. Arm Holdings, PLC*, 403 F.3d 1346, 1368 (Fed. Cir. 2005). “We first look to the specification for guidance as to the meaning of claim language.” *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1306 (Fed. Cir. 2006). “The specification is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315. The specification acts as a dictionary when it expressly or implicitly defines terms. *Id.* at 1321. Courts should also refer to the prosecution history if it is in evidence. *Vitronics Corp.*, 90 F.3d at 1582. The prosecution history is part of the intrinsic record and consists of a complete record of all proceedings before the United States Patent and Trademark Office, including prior art cited during the examination of the patent, and express representations made by the applicant as to the scope of the claims. *Phillips*, 415 F.3d at 1321.

The Federal Circuit has also stated that district courts may “rely on extrinsic evidence, which

consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Id.* (internal quotations omitted). Dictionaries and treatises can be “useful in claim construction[,]” particularly technical dictionaries which may help the court “to better understand the underlying technology and the way in which one of skill in the art might use the claim terms.” *Id.* at 1318 (internal quotations omitted). As to expert testimony, the Federal Circuit has stated:

[E]xtrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.

Id. However, “a court should discount any expert testimony that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.” *Id.* (internal quotations omitted). Extrinsic evidence is less significant than the intrinsic record and undue reliance on it may pose a risk of changing the meaning of claims, contrary to the public record contained in the written patent. *Id.* at 1317, 1319.

ULT argues that the claim language, specification, prosecution history, and extrinsic evidence together illustrate that one skilled in the art would construe “connected to” in claim 1 to require actual physical connection. *See* Br. Supp. ULT’s JMOL 5-8, ECF No. 246. Looking first to the claim language, ULT argues that the Federal Circuit has consistently construed “connected to” to mean joined together. *Id.* at 5. ULT argues that such a construction is supported by the intrinsic record of the patent, because the language of claim 18 provides for “output terminals for

connection to” the filaments of gas discharge lamps, in direct contrast to the language of claim 1. *Id.* As ULT notes, “[w]hen different words or phrases are used in separate claims, a difference in meanings is presumed.” *Nystrom v. Trex. Co.*, 424 F.3d 1136, 1143 (Fed. Cir. 2005). “However, simply noting the difference in the use of claim language does not end the matter. Different terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading of the terms or phrases is proper.”

Id.

ULT argues that short of overcoming the presumption, the specification and prosecution history underscore that the “connected to” limitation in claim 1 should not be construed to cover the same subject matter as the “for connection to” language in claim 18. ULT contends that the specification supports the “plain” meaning of “connected to” because every preferred embodiment shows a ballast actually connected to a lamp and because the term “connected to” is used in the specification to refer to actual physical connection. Br. Supp. ULT’s JMOL 6, ECF No. 246. Moreover, ULT argues that the prosecution history supports such an understanding because the inventor, Andrew Bobel, changed the language of claim 1 from “for connection to” to “connected to” in response to the Patent and Trade Office’s (“PTO”) initial rejection of the ‘529 patent. *Id.*

LBC responds that ULT is ignoring the Federal Circuit’s admonishment that claims terms must be given their ordinary meaning as understood by one skilled in the art in the context of the entire patent, rather than their ordinary meaning in a vacuum. See LBC’s Resp. ULT’s JMOL 4, ECF No. 247. LBC then cites the testimony of both Dr. Roberts, their infringement expert, and Dr. Giesselmann, ULT’s invalidity expert. *Id.* at 5. Looking to the intrinsic evidence of the ‘529 patent, LBC argues that the patent’s reference to the claimed invention as an “electronic ballast” strongly

supports a construction that does not require actual physical connection to a lamp. *Id.* at 6. Moreover, LBC contends that the patent's statement that each embodiment represents a circuit "for powering" or "adapted to power" a lamp illustrates that the intrinsic record supports construing "connected to" as interchangeable with "for connection to." *Id.* at 6-7.

In relevant part, claim 1 of the '529 patent provides for "an energy conversion device . . . comprising [*inter alia*] output terminals connected to the filaments of the gas discharge lamp." In contrast, claim 18 of the '529 patent provides for "output terminals for connection to the filaments of the gas discharge lamp." Given the difference in language, the Court must presume that the inventor meant something different absent strong evidence to the contrary. *Cf. Nystrom*, 424 F.3d at 1143. As discussed below, however, the Court finds that both the intrinsic and extrinsic record strongly support construing the "connected to" language of claim 1 as covering the same subject matter as the "for connection to" language of claim 18. Throughout the patent, Bobel described the claimed invention as an "electronic ballast," explicitly describing the entire invention as a "control and protection circuit for [an] electronic ballast." *See* App. Supp. ULT's JMOL 330, ECF No. 248. Describing the background of his invention, Bobel evaluates a series of circuit patterns used in the electronic ballast industry over the prior decades, before concluding that "it is highly desirable to have a series-resonant ballast for gas discharge lamps." *Id.* At the close of his summary of the invention, Bobel once again states that "[i]t will be understood that such a device as outlined above will provide a series-resonant ballast for gas discharge lamps." *Id.* Accordingly, Bobel consistently referred to his invention in the intrinsic record of the '529 patent as an electronic ballast, with the main novelty being the control and protection circuit in the ballast described in further detail later in the specification. This self-description of the claimed invention as a control circuit for an

electronic ballast raises a strong presumption that any claim construction must accord with the inventor's specifically claimed invention. “The construction that stays true to the claim language and most naturally aligns with the *patent's description of the invention* will be, in the end, the correct construction.”” *Nystrom*, 424 F.3d at 1142 (quoting *Phillips*, 415 F.3d at 1316) (emphasis added).

Looking further into the specification, the corresponding structure for the three series current paths described in columns 3 and 4, and described in further detail in columns 7 and 8 of the patent, strongly support construing the term “connected to” as identical to “for connection to.” Specifically, the specification’s description of Mode B contemplates the ballast as operational in the absence of a gas discharge lamp physically connected to the ballast’s output terminals. *See* App. Supp. ULT’s JMOL 333, ECF No. 248. “While the device is operational as in Mode A, if the fluorescent lamp is removed out of its holder . . . the transistor turns OFF the device and the oscillations cease.” *Id.* The fact that the patent’s specification, describing the “details of operation” of the first preferred embodiment of the patent (which represents, per the agreement of the parties, the classic function of the ‘529 patent according to claim 1), specifically describes the functioning of the ballast when there is no gas discharge lamp connected to the output terminals strongly supports LBC’s construction. *Id.* Moreover, such description further bolsters Andrew Bobel’s opening claim that the ‘529 patent claims an invention for a “control and protection circuit for an electronic ballast.”

Turning to the prosecution history, the Court agrees with LBC that Bobel’s change in the language of claim 1 does not necessarily or clearly constitute a substantive amendment to the claim language meant to alter the claim or to differentiate claim 1 from claim 18. *See* LBC’s Resp. ULT’s JMOL 7-8, ECF No. 247. ULT states that in response to a PTO rejection of the ‘529 patent, Bobel

changed the language in claim 1. *See* ULT's JMOL 6, ECF No 246. Since he simultaneously added claim 18, using the "for connection to" language, ULT argues that Bobel "clearly understood . . . that 'connected to' and 'for connection to' have different meaning." *Id.* Such correlation, while superficially reasonable, does not stand up to scrutiny given the nature and import of the PTO's action rejecting the '529 patent. As LBC notes, the PTO action rejected claim 1 as anticipated by Zuchtriegel. LBC's Resp. ULT's JMOL 8, ECF No. 247. Bobel responded by arguing that his particular arrangement of "control means" and "direct current blocking means" differentiated the '529 from the prior art reference. *Id.* In essence, Bobel essentially conceded that the output terminals claim limitation did not represent a novel claim, relying on different elements of claim 1. *Id.* Given that the PTO's action, and Bobel's subsequent response, ignore the output terminals claim limitation, it would be mere speculation to endow the change with any importance. Indeed, LBC's suggestion that Bobel "simply parroted" the PTO is just as likely, if not more likely, than ULT's strained reading of the change. As such, the Court finds that the prosecution history does not provide any evidence in support of either party's construction position.

Lastly, the Court turns to the expert testimony adduced by the parties at trial as they crafted their claim construction arguments for the jury. LBC's infringement expert, Dr. Roberts, testified that he found ULT's proposed construction "nonsensical" in light of the text and purpose of the patent, and strongly advocated construing "connected to" as interchangeable with "for connection to." *See* App. Supp. LBC's Resp. ULT's JMOL 11, ECF No. 248. On cross-examination, ULT's invalidity expert Dr. Giesselmann essentially agreed, responding "Yes" when counsel for LBC asked him if he had "used the words connect to and for connection to . . . interchangeably." *Id.* at 242-43. In contrast, Mr. Burke, ULT's infringement expert, testified that he understood the term "connected

to” to mean “connected to.” *See* App. Supp. ULT’s JMOL 221, ECF No. 246. Moreover, ULT argues that Dr. Giesselmann’s statement is taken out of context, noting that he used the terms interchangeably for the purposes of his invalidity analysis because the prior art references showed a ballast connected to lamps, and because at the time of his report claim 18 was still being asserted in this suit. *See* Br. Supp. ULT’s JMOL 7-8, ECF No. 246.

As discussed *supra*, extrinsic evidence, especially expert testimony adduced at trial, is one of the least reliable evidentiary sources for claim construction purposes. *Cf. Phillips*, 415 F.3d at 1317-19. Nonetheless, despite ULT’s arguments to the contrary, it is telling that both Dr. Roberts and Dr. Giesselmann agreed that the terms “connected to” and “for connection to” should be used interchangeably. While true that Dr. Giesselmann’s report and testimony was directed towards ULT’s invalidity arguments, Dr. Giesselmann nonetheless did agree with Dr. Roberts that the term should be construed interchangeably. Of greater importance, the expert opinions of Dr. Roberts and Dr. Giesselmann accord with the specification and the inventor’s own description of the invention. Given the inventor’s description of the patent’s invention as a circuit for an electronic ballast, the fact that the specification contemplates removal of a lamp during operation of claim 1, and the expert evidence adduced at trial, the Court finds that one skilled in the art would understand “connected to” in claim 1 of the ‘529 patent as meaning “for connection to.”

Given such construction, the Court finds that there was sufficient evidence adduced at trial that the accused ULT products have “output terminals for connection to” a gas discharge lamp.

2. “Control Means” Limitation

ULT moves for judgment as a matter of law on the grounds that LBC failed to present legally sufficient evidence that the accused products infringe the “control means” limitation of the asserted

claims. *See* Br. Supp. ULT’s JMOL 8, ECF No. 246. ULT argues that the evidence is insufficient as a matter of law on three grounds: 1) Dr. Roberts’ testimony on equivalent structure was conclusory and insufficient as a matter of law under Federal Circuit precedent; 2) no reasonable jury could have concluded that the differences between control circuit 58 and the accused products are insubstantial in light of the undisputed differences; and 3) the evidence was clear that the structures used in the accused products were not available at the time the ‘529 patent issued.

The parties agreed during claim construction that the “control means” element of claim 1 should be construed according to section 112, ¶6 as a means-plus-function claim term. *See* Am. Claim Construction Order 24, ECF No. 107. In the Jury Charge, the Court explained that the “control means” requirement of the ‘529 patent recites four functions:

(1) control means

- (a) capable of receiving a control signal from the DC input terminals and;
- (b) operable to effectively initiate oscillations, and;

(2) control means

- (a) capable of receiving a control signal from the resonant converter, and;
- (b) operable to effectively stop the oscillations.

See Jury Charge 8, ECF No. 241. The Court further explained that the “corresponding structure for the ‘control means’ requirement is the control circuit (58) described at column 3, line 59 through column 4, line 21 of the ‘529 Patent.’ *Id.* At column 3, line 59 through column 4, line 21 the patent describes a series of discrete electrical components arrayed in a specific configuration to form three series current paths to fulfill the function of starting and stopping the oscillations of the resonant converter. *See* App. Supp. ULT’s JMOL 331, ECF No. 246.

As ULT notes, LBC does not allege that any of the accused products have a structure identical to the corresponding structure described in the specification of the ‘529 patent. *See Br. Supp* ULT’s JMOL 8, ECF No. 246. Rather, LBC argued (and the jury agreed), that the accused products have an equivalent structure to the control circuit 58 of the ‘529 patent. “For a means-plus-function claim term, the term literally covers an accused device if the relevant structure in the accused device performs the identical function recited in the claim and that structure is identical to or equivalent to the corresponding structure in the specification.” *Intellectual Science & Tech., Inc. v. Sony Elecs., Inc.*, 589 F.3d 1179, 1183 (Fed. Cir. 2009) (citing *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1099 (Fed. Cir. 2008)). However, a merely conclusory expert opinion is insufficient evidence to justify a finding of equivalence. *Id.* at 1181-86.

ULT predominantly relies on *Intellectual Science* for the proposition that Dr. Roberts’ testimony in the instant case is conclusory and insufficient as a matter of law. *See Br. Supp.* ULT’s JMOL 8-12, ECF No. 246. In *Intellectual Science*, the Federal Circuit reviewed the conclusions of a special master and district court that an expert’s infringement opinion was insufficient to create a genuine issue of material fact for the purposes of summary judgment. *Intellectual Science*, 589 F.3d at 1182-83. The special master identified a structure including four elements and recommended granting summary judgment in favor of non-infringement because the Plaintiff’s expert report was “merely conclusory.” *Id.* at 1183. According to the special master, the expert report did “not annotate the circuit diagrams upon which [the expert] reli[e]d,” nor did the report identify a “specific structure” that infringed. *Id.* On appeal, the Federal Circuit held that the report did “not sufficiently identify the structural elements of the claims ‘data transmitting means.’” *Id.* at 1184. Specifically, the report at issue in *Intellectual Science* did not pinpoint the structures that performed the claimed

functions, thus failing to show an “infringing structure.” *Id.* Rather, using a diagram without descriptions, the expert report presented “an unexplained array of electronic symbols.” *Id.* The court held that “[e]ven if the elements are common components, the record must specifically identify the infringing features of those components and the reason that one of skill in the art would recognize them as infringing. Without further identification and explanation, a reasonable juror would not be able to determine that those allegedly infringing components are actually present.” *Id.* The expert’s report also required several logical leaps and illogical inferences, resulting from “opaque” identifications. *Id.* The report then concluded, without explanation, that the accused devices performed the same function, in the same way, to achieve the same result. *Id.* at 1185. The Federal Circuit held that conclusory statement “insufficient.” *Id.*

The extensive testimony Dr. Roberts gave on the issue of equivalence on direct and during cross-examination and re-direct is clearly distinguishable from the perfunctory expert report at issue in *Intellectual Science*. Dr. Roberts first identified and explained the structure and function of control circuit 58, and explained in detail the manner in which control circuit 58 operates in the ‘529 patent. *See* App. Supp. LBC’s Resp. ULT’s JMOL 24-26, ECF No. 248. Having detailed the structure, function and operation of the control circuit, Dr. Roberts proceeded to explain the structure of the accused products and why such structures were equivalent for infringement purposes. Dr. Roberts, using schematics in open court, was first asked to identify and highlight the control circuitry found in the Linear Group 1 products. *See* App. Supp. ULT’s JMOL 26, ECF No. 246. Dr. Roberts identified where the DC enters the control means, before testifying that the accused products perform the first function of the ‘529 patent control means of receiving a control signal from the DC input terminals. *Id.* at 26-27. Next, Dr. Roberts testified that the accused

products satisfy the second function of the control means limitation, stating that it initiates oscillations. *Id.* at 27. Of greater import for the instant inquiry, however, Dr. Roberts also explained how the accused product performs the relevant function stating: “The signal flows down through these resistors[,] through these discreet transistors and eventually over the integrated circuit only into a pin labeled EN2[,] which enables oscillations.” *Id.*

Dr. Roberts then proceeded to elaborate, explaining that the integrated circuit (“IC”) used in the accused products constitutes “a large collection of semiconductor parts on a single piece of silicone, and they are put together for specific purposes to do advanced functions. So instead of having a hundred separate transistors and resistors, you grow them all on one small silicone chip.” *Id.* at 28. Dr. Roberts explained that despite the various functions performed by an IC, “you are still limited to a certain number of pins on the package which are electrical connections.” *Id.* Dr. Roberts further explained that in the accused products, the IC “comprises only a portion of the control circuit” because “there are a number of discreet electrical components outside of the [IC] that are part of the control circuit.” Dr. Roberts emphasized that “it is these parts that bear the really close similarity to [the control means] in the ‘529 patent.” *Id.* at 29. Dr. Roberts concluded by issuing the series of conclusory equivalence statements highlighted by ULT in their brief. *Id.* at 30-32. However, in the context of Dr. Roberts’ testimony as a whole, such conclusions stemmed naturally from his analysis, description, and explanation of the structure and operation of the accused products. As such, ULT’s recitation of Dr. Roberts’ testimony on direct examination ignores the context in which his superficially conclusory remarks appear.

Dr. Roberts further expounded on his equivalency analysis on cross-examination, explaining the function of the zener diode in several accused products as equivalent to the diac used in the ‘529

patent. *See* App. Supp. LBC's Resp. ULT's JMOL 122-25. Dr. Roberts described the manner in which, looking to both the schematics of the ULT products and ULT's '652 patent, one could see how the zener diode performed the exact same function as the diac in the '529 patent. *Id.* Indeed, as Dr. Roberts often noted, the '652 patent describes the zener diode as an "equivalent" of a diac. *Id.* Through the course of his testimony, Dr. Roberts carefully explained the reasoning behind his conclusions, replete with discussion of the functions performed by the accused products and the structures that perform those functions. Of greater import, Dr. Roberts compared the manner in which the structures in the accused products worked with the way the corresponding structures of the control means in the '529 patent would operate, proffering exhaustive explanations of their similarities.

Accordingly, the Court finds that Dr. Roberts' testimony is entirely distinguishable from the perfunctory analysis at issue in *Intellectual Science*. In *Intellectual Science* the expert report did not label the schematics at issue, did not detail the corresponding structures in the accused products allegedly performing the claimed functions of the patent, and did not show how such structures would accomplish the claimed function. *See Intellectual Science*, 589 F.3d at 1183-86.

ULT further argues, regardless of the testimony of Dr. Roberts, no reasonable jury could find the structure of the accused products equivalent to the control means of the '529 patent given the undisputed differences adduced at trial. *See* Br. Supp. ULT's JMOL 12-13, ECF No. 246. ULT focuses on two distinctions in particular: 1) that the accused products draw power when shutdown; and 2) that the accused products use a "program start" rather than "rapid start" configuration. *Id.* Despite ULT's characterization, neither distinction was "undisputed." Rather, in regards to the first alleged difference, Andrew Bobel testified that the '529 patent would draw power when shutdown,

just at substantially lower levels than previously required. *See* App. Supp. LBC's Resp. ULT's JMOL 150-51, ECF No. 248. As to the second alleged difference, Dr. Roberts continually testified that programmed start ballasts are a subset of rapid start ballasts. *Id.* at 189-90. Given such conflicting testimony and evidence, the Court resolving a motion for judgment as a matter of law must ignore or reject any evidence the jury was not required to believe. Viewing the evidence in that light, the Court cannot say that no reasonable juror could find the alleged differences insubstantial.

Leaving aside the obvious evidentiary disputes in the record, ULT invites the Court to find that to the extent such differences indisputably exist, such differences are substantial as a matter of law. ULT cites this Court to no supporting case law and, indeed, such a conclusion would fly in the face of the Court's construction of the "control means" limitation. The Court identified neither function in construing the "control means" limitation. *See* Jury Charge 8, ECF No. 241. Moreover, the corresponding structure identified by the Court during claim construction makes no mention of such differences. Accordingly, the Court finds that it was the duty of the jury to weigh the conflicting testimony regarding the allegedly undisputed differences identified by ULT. The Court further finds that, even ignoring the clearly conflicting evidence adduced at trial, ULT's argument seeks to import new limitations into the "control means" limitation in conflict with the Court's claim construction.

ULT's final argument for judgment as a matter of law on the basis of the "control means" limitation is that the ICs in the accused ULT ballasts were not available at the time the '529 patent issued, barring a finding of equivalence. *See* Br. Supp. ULT's JMOL 13-14, ECF No. 246. ULT's argument goes to the heart of the difference between an equivalence analysis under the doctrine of

equivalents and under §112 ¶6. “Structural equivalents and the doctrine of equivalents are ‘closely related.’” *Welker Bearing Co.*, 550 F.3d at 1099 (quoting *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1309 (Fed. Cir. 1998)). “They are related in the sense that both §112 ¶6 and the doctrine of equivalents apply ‘similar analysis of insubstantiality of the differences’ between a disclosed structure and an accused infringing structure.” *Id.* (quoting *Chiuminatta*, 145 F.3d at 1310). “However, an important difference between the two inquiries ‘involves the timing of the separate analyses for an ‘insubstantial change.’” *Id.* (quoting *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1320 (Fed. Cir. 1999)). “Namely, an equivalent structure under §112 ¶6 ‘must have been available at the time of the issuance of the claim,’ whereas the doctrine of equivalents can capture after-arising ‘technology developed after the issuance of the patent.’” *Id.* (quoting *Al-Site Corp.*, 174 F.3d at 1320).

ULT argues that since application specific ICs (“ASIC”) were not available at the time the ‘529 patent issued, they cannot constitute “equivalent structures” as a matter of law. *See* Br. Supp. ULT’s JMOL 13-14, ECF No. 246. ULT argues that “[u]ncontested testimony established that ASICs and microcontrollers . . . were not developed until the late 1990s, after the ‘529 patent issued.” *Id.* The portion of the trial record ULT cites for the above proposition states that “ICs for controlling ballasts were not readily available to us” due to their “expense,” noting that “a more cost effective solution for us was discreet implementation.” *See* App. Supp. ULT’s JMOL 154-55, ECF No. 246. This testimony does not, in fact, stand for the proposition that ICs were not available at the time the ‘529 patent issued. Indeed, at the close of ULT’s cited testimony it states: “At this time frame in 1997, integrated circuits started to become available to us and also in a cost point that was attractive . . .” *Id.* at 156. These portions of the trial record only show that during the early 1990’s

ICs for ballasts were not cost effective, but that such ICs were readily available by 1997. Similarly, ULT states that “Mr. Bobel himself agreed that ICs made for ballasts specifically were not available at the time” of the issuance of the ‘529 patent. *See* Br. Supp. ULT’s JMOL 13-14, ECF No. 246. However, a review of his actual trial testimony illustrates that Bobel stated that he could not find an IC that worked or performed in a ballast the way he “wanted.” *See* App. Supp. ULT’s JMOL 104, ECF No. 246. While the jury may have been able to reasonably infer that ICs for ballasts were not available based on Bobel’s testimony, there is certainly no undisputed testimony to that effect.

In fact, not only is ULT’s cited testimony not on point, but it completely ignores Dr. Roberts’ testimony to the contrary. As noted *supra*, when considering a motion for judgment as a matter of law, “although the court should review the record as a whole, it must disregard all evidence favorable to the moving party that the jury is not required to believe.” *Reeves*, 530 U.S. at 151. Dr. Roberts testified that he began working with ICs in 1964, and saw an IC used in a ballast as early as 1980. *See* App. Supp. LBC’s Resp. ULT’s JMOL 13, ECF No. 248. He further testified that “anybody skilled in the art would have been aware of integrated circuits in 1993.” *Id.* at 16. Once again, given the conflicting evidence on the issue, the Court must disregard the evidence favorable to the moving party (ULT) that the jury was not required to believe.

Accordingly, the Court finds that the jury had legally sufficient evidence to determine that ICs for electronic ballasts were available at the time of the issuance of the ‘529 patent.

3. “Direct Current Blocking Means” Limitation

ULT moves for judgment as a matter of law on the ground that LBC failed to present legally sufficient evidence that the accused products infringe the “direct current blocking means” limitation of the asserted claims. *See* Br. Supp. ULT’s JMOL 14, ECF No. 246. ULT contends that LBC

failed to present legally sufficient evidence that the accused products meet this claim limitation on two grounds: 1) LBC provided no evidence that the capacitors identified by Dr. Roberts as comprising the “direct current blocking means” are the same as or equivalent to the DC blocking capacitors the Court identified as the corresponding structure; and 2) LBC presented no evidence that the accused products are “connected to” gas discharge lamps as required by this claim limitation. *Id.* at 14-16. Dealing with ULT’s second ground first, ULT relies entirely on the arguments made *supra* in contending that the Court should construe “connected to” to require actual physical connection. *Id.* at 16 (citing to Section I of the brief, which discussed the “output terminals” limitation of claim 1). For the same reasons discussed above, the Court finds that ULT’s argument regarding the “connected to” phraseology is not well-taken and does not accord with the way the patent as a whole should be read.

Returning to ULT’s first ground, ULT argues that LBC provided no evidence that the capacitors Dr. Roberts identified in the accused products as comprising the “direct current blocking means” are an identical or equivalent structure. *Id.* at 14. The Court construed the “direct current blocking means” limitation, much like the “control means” limitation discussed above, as a means-plus-function claim governed by §112 ¶6. *See* Jury Charge 8, ECF No. 241. “The claimed function of the ‘direct current blocking means’ is ‘operable to stop the flow of the control signal from the DC input terminals, whenever the DC control path through the filaments is broken due to lamp removal or a broken filament.’ The corresponding structure for the ‘direct current blocking means’ requirement is as follows: ‘DC blocking capacitors (08 and 25) connected to the heatable filaments of the lamp.’” *Id.*

ULT argues that the testimony of “every witness” who addressed the “direct current blocking

means” limitation conclusively established that the accused products do not have a “DC blocking capacitor” coupled to each set of output terminals as required by the Court’s claim construction. *Id.* ULT argues that in his infringement analysis, Dr. Roberts merely identified a capacitor coupled to every set of output terminals “without explanation,” and “collectively called those capacitors the ‘direct current blocking means.’” *Id.* “He never explained why the capacitors he identified were the same as or equivalent to” the corresponding structure identified by the Court. *Id.* at 14-15. ULT argues that while Dr. Roberts’ analysis “might be sufficient if *any* capacitor” could serve as an equivalent to the corresponding structure identified by the Court, LBC itself has already argued that not all capacitors are “DC blocking capacitors.” *Id.* (citing LBC’s Resp. ULT’s Mot. Recon. 1-2, 4-7, ECF No. 184). Indeed, in responding to ULT’s Motion for Reconsideration, LBC argued that the “DC blocking capacitors” identified in the Court’s claim construction “are distinct from other capacitors in the circuit.” *Id.* ULT argues that “LBC cannot have it both ways,” and that either “any” capacitor coupled to a set of output terminals satisfies the “DC blocking means limitation,” requiring a finding of invalidity, or Dr. Roberts’ infringement analysis is insufficient as a matter of law. *See* Br. Supp. ULT’s JMOL 15, ECF No. 246. Moreover, ULT argues that Dr. Roberts’ infringement analysis conflicts with his deposition testimony given only three days prior to the start of trial, in which Dr. Roberts stated that the Court’s claim construction required that each “DC blocking capacitor” be operable to stop the flow of the control signal. *Id.*

LBC responds that ULT’s argument “is based on a flawed premise.” *See* LBC’s Resp. ULT’s JMOL 16, ECF No. 247. LBC states that ULT’s argument is incorrect on two grounds: 1) “it ignores the claim language ‘coupled to the output terminals,’ which require[s] that each set of output terminals be accounted for[;]” and 2) “it fails to distinguish between individual DC blocking

capacitors and the DC blocking means as a whole.” *Id.* at 16-17. LBC contends that the DC blocking capacitors, in both the ‘529 patent and the accused products, must as a whole account for each set of output terminals such that they are collectively operable to stop the flow of the DC control signal whenever the DC control path is broken due to lamp removal or a broken filament. *Id.* at 17. According to LBC, Dr. Roberts correctly identified the function of the “DC blocking means,” the proper corresponding structure, and clearly explained the manner in which structures in the accused products were equivalent to the structures identified in the ‘529 patent. *Id.*

Dr. Roberts testified that the function of the “DC blocking means” limitation was to stop the flow of the control signal whenever the DC control path was broken due to lamp removal or a broken filament. *See App. Supp. LBC’s Resp. ULT’s JMOL 60-62, ECF No. 248.* He then identified a collection of capacitors in each of the accused products which were both operable to stop the flow of the DC control signal, and capable of accounting for each set of output terminals. *Id.* at 60-63. For example, testifying regarding the representative Linear Group 1 product, Dr. Roberts carefully identified three separate capacitors as “DC blocking capacitors,” noting which capacitors were coupled to which set of output terminals. *See App. Supp. ULT’s JMOL 35, ECF No. 246.* He then explained that those three capacitors collectively compose a “single DC blocking means.” *Id.* Dr. Roberts further explained to the jury that “[b]ecause the middle set of terminals is connected to these two series connected filaments, one in each lamp, if either lamp is removed it is like pulling out a lamp on a Christmas tree string. If either lamp is removed then the connection is broken to the middle terminal and the DC current – and the DC control current will stop.” *Id.* at 36. Accordingly, as with the “control means” limitation discussed above, Dr. Roberts carefully identified the structures (discreet capacitors) in the accused products that perform the function of the “DC

blocking means.” *Id.* at 35-37. On that basis, Dr. Roberts testified that the accused products literally infringe the ‘529 patent using identical structures, to perform an identical function, in an identical manner.

“For a means-plus-function claim term, the term literally covers an accused device if the relevant structure in the accused device performs the identical function recited in the claim and that structure is identical to or equivalent to the corresponding structure in the specification.” *Intellectual Science*, 589 F.3d at 1183 (Fed. Cir. 2009) (citing *Welker Bearing*, 550 at 1099). Dr. Roberts’ testimony is clearly a legally sufficient evidentiary basis for the jury to conclude that the accused products perform the function of stopping the DC control signal whenever a gas discharge lamps is removed or has a broken filament. Moreover, Dr. Roberts’ testimony shows that the accused products, like the ‘529 patent, use capacitors to perform this function.

ULT argues that even if a reasonable jury could find that the accused products literally infringe the “direct current blocking means” limitation of the ‘529 patent, a reasonable jury could not find both literal infringement and simultaneously find that the ‘529 patent was not invalid as anticipated. See Br. Supp. ULT’s JMOL 15, ECF No. 246. However, ULT fails to recognize that they had the burden to prove to the jury by *clear and convincing* evidence that the cited Japanese prior art references anticipated each and every limitation of the ‘529 patent. A reasonable jury could find infringement by a preponderance of the evidence, without being able to find invalidity by clear and convincing evidence. As discussed at greater length *infra*, the jury had a reasonable evidentiary basis to find that ULT did not meet its burden to prove invalidity by clear and convincing evidence.

Accordingly, the Court declines ULT’s motion for judgment as a matter of law on the basis of the “direct current blocking means” limitation.

4. Linear Group 3 Products

ULT seeks judgment as a matter of law on the Linear Group 3 products on the basis that there was legally insufficient evidence of literal infringement that the products infringe claims 1, 2 and 5 of the '529 patent. *See* Br. Supp. ULT's JMOL 16, ECF No. 246. ULT argues that since the Court struck Dr. Roberts' testimony regarding the Linear Group 3 products, and the exhibits presented in conjunction with Dr. Roberts' testimony, the jury's verdict of infringement on such products was "completely without evidentiary support." *Id.* According to ULT, the only record evidence regarding the accused Linear Group 3 products before the jury was Joint Exhibit 81, and the testimony of Mr. Burke that the products do not meet the "direct current blocking means" or "control means" limitations of the '529 patent. *Id.* at 17. ULT argues that Joint Exhibit 81 displays the DC control signal only passing through one lamp, which is insufficient to establish infringement. *Id.*

LBC argues that ULT misrepresents the state of the trial record and the extant record evidence before the jury. *See* LBC's Resp. ULT's JMOL 18, ECF No. 247. First, LBC contends that Joint Exhibit 81 provides a detailed schematic for the Linear Group 3 representative products, illustrating its component parts and showing how it works. *Id.* LBC argues that the jury "could have compared" that schematic to the other schematics in evidence containing Dr. Roberts' markings. *Id.* Moreover, LBC argues that because both Dr. Roberts and Mr. Burke explained that the Linear Group 3 products function almost identically to the Linear Group 1 and 2 products, the jury could have reasonably concluded that the Linear Group 3 products infringe the '529 patent. *Id.* at 19.

Dr. Roberts testified at length during trial about the structure and function of the Linear

Group 3 representative product, concluding that the products literally infringe each claim limitation of the ‘529 patent. *See* App. Supp. ULT’s JMOL 44-52, ECF No. 246. During his testimony, Dr. Roberts drew the DC control path, showing the path going through the output terminals of both the upper and lower lamp in a two-lamp configuration of the Linear Group 3 representative product. *Id.* at 45-48. Dr. Roberts’ testimony, however, conflicted with his expert report and his opinion had not been disclosed to ULT until he was actually on the stand. As a result, the Court struck the entirety of Dr. Roberts’ testimony regarding the Linear Group 3 products, and struck the exhibits created and presented during the course of his testimony. *Id.* at 56. ULT argues that because the Court struck the above evidence, the jury could only rely on Joint Exhibit 81, showing Dr. Roberts’ original, one-lamp DC control path, and the testimony of Mr. Burke.

Problematically for ULT, the great weight of the evidence shows that virtually every witness that testified grouped the Linear Group 3 products with the Linear Group 1 and 2 products for the purposes of infringement. Dr. Roberts explained that ULT used the same IC in all of their Linear Group 1, 2, and 3 products, providing for an identical “equivalence” analysis for all three product groups. *See* App. Supp. LBC’s Resp. ULT’s JMOL 75-76, ECF No. 248. Moreover, Mr. Burke and ULT grouped “the ULT Linear 1 to 3 ballasts” together on direct. *Id.* at 215-16. Mr. Burke expounded his non-infringement expert opinions regarding all three products collectively, noting that the products were the “same” in a wide variety of ways. *Id.* at 215-17. However, Mr. Burke did note that the products shut down oscillations and sense fault differently. *Id.* at 217. In particular, Mr. Burke explained that the Linear Group 3 products use “two different types of shut downs,” a voltage and a current sense. *Id.* at 220. This is almost identical to his testimony regarding Linear Group 1, and underscored ULT’s attempts to avoid a jury finding of equivalence on the

“control means” limitation of the ‘529 patent. *Id.* Mr. Burke then concluded that he viewed “the linear ballasts” as “substantially different” from the ‘529 patent. *Id.* at 220-21.

The record evidence regarding the Linear Group 3 products consists of Joint Exhibit 81, the non-struck testimony of Dr. Roberts that the linear products use the same IC, and Mr. Burke’s testimony. Mr. Burke, in particular, continuously grouped the products together, differentiating them solely for the purpose of discussing their slightly different “control means.” *Id.* at 220. The great weight of the evidence, presented by both parties, underscored the overriding similarity between the linear products, with Mr. Burke highlighting only the minimal differences referenced above. Combined with the schematic and the testimony of Dr. Roberts, and giving due deference to the jury verdict, the Court finds that reasonable jurors could rely on the testimony of the arrayed experts and conclude that the Linear Group 3 products infringed the ‘529 patent in the same way and for the same reasons as the Linear Group 1 and 2 products.

5. Invalidity

ULT seeks judgment as a matter of law on the basis that the asserted claims of the ‘529 patent are invalid as anticipated by JP ‘997 and JP ‘799. *See* Br. Supp. ULT’s JMOL 17, ECF No. 246. ULT contends that it presented “largely uncontested” evidence of anticipation, and that “[o]n the few contested points” LBC’s arguments run counter to the claim construction, claim language, or LBC’s own infringement contentions.

“Anticipation requires a showing that each element of the claim at issue, properly construed, is found in a single prior art reference.” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1323 (Fed. Cir. 2011). “Under § 282 of the Patent Act of 1952, ‘[a] patent shall be presumed valid’ and ‘[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party

asserting such invalidity.”” *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. ___, No. 10-290, at 1 (June 9, 2011) (quoting 35 U.S.C. § 282). “But, while the statute explicitly specifies the burden of proof, it includes no express articulation of the standard of proof.” *Id.* at 6. However, “by stating that a patent is ‘presumed valid,’ Congress used a term with a settled meaning in the common law.” *Id.* at 7. Analyzing the common law import of a patent’s presumption of validity, the Supreme Court held that a defendant must prove invalidity by “clear and convincing evidence.” *Id.* at 8 (“According to its settled meaning, a defendant raising an invalidity defense bore ‘a heavy burden of persuasion,’ requiring proof by clear and convincing evidence.”) (quoting *Radio Corp. of Am. v. Radio Eng’g Labs.*, 292 U.S. 1, 8 (1934)). In accord with this recent Supreme Court precedent, the Court instructed the jury that “[i]n order to overcome the presumption of validity, Defendant must show it is highly probable the asserted claims of the patent are invalid.” See Jury Charge 15, ECF No. 241.

In reviewing the jury verdict, the Court must be mindful that “[a]nticipation is a factual determination that is reviewed for substantial evidence when decided by a jury.” *Koito Mfg. Co. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1149 (Fed. Cir. 2004). The Court may grant judgment notwithstanding a jury verdict of anticipation “only if the jury’s factual findings are not supported by substantial evidence.” *Baxter Int’l, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1332 (Fed. Cir. 1998).

A. ‘JP 997

ULT contends that the Court should enter judgment in its favor on the basis that the asserted claims of the ‘529 patent are invalid as anticipated by JP ‘997. *Id.* ULT invalidity expert Professor Michael Giesselmann (“Giesselmann”) testified that JP ‘997 disclosed every element of claim 1 of the ‘529 patent. *Id.* ULT argues that LBC failed to rebut Giesselmann’s testimony that ‘JP 997

taught all the claim limitations of claim 1, except in regards to the “direct current blocking means” limitation. *See* Br. Supp. ULT’s JMOL 18, ECF No. 246. ULT further argues that even on the “direct current blocking means” limitation, LBC did not dispute Giesselmann’s testimony that capacitors C2a and C2b perform the DC blocking means, and that such capacitors were connected to each of the four lamp filaments. *Id.* ULT contends that Dr. Zane’s rebuttal, that C2a and C2b were not “DC blocking capacitors” because they did not heat the filaments and were not connected in series with secondary windings, violates the Court’s claim construction of the “direct current blocking means” limitation. *Id.* Moreover, ULT argues that Dr. Zane stated that a capacitor must be connected to “every” output terminal, while under the Court’s construction a capacitor need only be connected to each set of output terminals. *Id.*

Giesselman also testified that JP ‘997 anticipates claim 2 and claim 5 of the ‘529 patent. According to ULT, Dr. Zane did not dispute Giesselmann’s testimony regarding claim 2. *Id.* at 19. Dr. Zane did dispute Giesselmann’s testimony regarding claim 5, but ULT contends that his testimony conflicted with LBC’s infringement theory. *Id.* Accordingly, ULT argues that no reasonable juror could have found claim 5 both infringed and invalid. *Id.*

LBC responds that the trial record provides a legally sufficient evidentiary basis for the jury’s verdict that ULT did not meet its burden to prove invalidity by clear and convincing evidence. *See* LBC’s Resp. ULT’s JMOL 19, ECF No. 247. LBC argues that Dr. Zane testified that JP ‘997 does not teach the “direct current blocking means” limitation because the alleged means in the prior art reference does not account for each set of output terminals. *Id.* at 19-20. LBC also contends that Giesselmann’s testimony was substantially undercut on cross-examination, allowing the jury to conclude that ULT did not meet its weighty evidentiary burden. *Id.*

Dr. Zane testified that due to the “different approach” to approach to heating the filaments taught by JP ‘997, the inventor failed to anticipate the “direct current blocking means” limitation of claim 1. *See* App. Supp. LBC’s Resp. ULT’s JMOL 268-69, ECF No. 248. Specifically, Dr. Zane agreed “that the DC blocking means is the collection of the DC blocking capacitors” and that they “collectively must account for each set of output terminals.” *Id.* at 269. Dr. Zane then agreed that “it is for that reason that this reference does not teach DC blocking means.” *Id.* Moreover, as noted by LBC, on cross-examination Giesselmann explained that he would have to “redraw” the schematic of JP ‘997 to show how one of the alleged “DC blocking capacitors” was connected to a certain set of output terminals. *Id.* at 248.

The Court may only grant ULT’s motion “if the jury’s factual findings are not supported by substantial evidence.” *Baxter Int’l, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1332 (Fed. Cir. 1998). ULT contends that Giesselmann presented undisputed testimony that the capacitors C2a and C2b “were connected to each of the four lamp filaments.” *See* Br. Supp. ULT’s JMOL 18, ECF No. 246. To the contrary, however, Giesselmann’s allegedly undisputed expert opinion was actually undercut on cross-examination. During direct examination, Giesselmann was asked about the whether JP ‘997 disclosed the direct current blocking means. *See* App. Supp. ULT’s JMOL 238, ECF No. 246. He responded: “Yeah. You would have to redraw this a little bit to show it, but so basically direct current cannot go past here. These capacitors, they act as DC blocking capacitors.” *Id.* However, Geiselmann testified that he did not disclose this connection in his report or at anytime prior to trial. *Id.* at 239-40.

On cross-examination, counsel for LBC asked Gieselmann about the capacitor he attempted to re-draw in an effort to show it connected to a particular set of output terminals. *See* App. Supp.

LBC's Resp. ULT's JMOL 248, ECF No. 248. Giesselmann testified that the capacitor C 30 was "effectively connected to two" output terminals. *Id.* He then testified that he wanted to "redraw" his schematic, to show how it accounted for a different set of output terminals. *Id.* When asked if he had disclosed such a drawing in his report, Gieselmann responded "no." *Id.* Counsel for LBC asked similar questions regarding capacitor C 26, eliciting testimony from Giesselmann that nothing in his drawings or report showed that the capacitor accounted for the output terminals he had previously testified that they accounted for. *Id.* at 249. Moreover, as noted by LBC, Dr. Zane specifically testified that JP '997 failed to teach DC blocking means capable of accounting for each "set" of output terminals. *See* LBC's Resp. ULT's JMOL 20, ECF No. 247. While ULT argues that Dr. Zane incorrectly testified that a capacitor must be directly connected to every output terminal, he clearly stated "[c]orrect" when asked whether the DC blocking means must account for each *set* of output terminals. *See* App. Supp. LBC's Resp. ULT's JMOL 269, ECF No. 248. On that basis, Dr. Zane testified that JP '997 does not teach the "direct current blocking means" limitation of claim 1 of the '529 patent.

Considering the extant evidence in the light most favorable to the non-movant, the Court finds that the jury's verdict not finding invalidity on the basis of JP '997 is supported by substantial evidence.

B. JP '799

ULT argues that Dr. Zane attempted to draw two distinctions between the '529 patent and JP '799, and that both distinctions conflict with LBC's infringement contentions. *See* Br. Supp. ULT's JMOL 19, ECF No. 246.

According to ULT, Dr. Zane attempted to argue that claim 1 requires a resonant signal,

specifically an AC signal. *Id.* at 19-20. ULT argues that a reasonable juror could not have accepted this as a distinction over prior art because that language is not found in the claim or in the specification. *Id.* at 20. Moreover, according to ULT, Dr. Zane's contention that JP '799 does not disclose an equivalent structure to the control means of the '529 patent runs counter to LBC's infringement contentions. *Id.* Specifically, ULT argues that Dr. Zane's contention that because part of the "control means" identified by Giesselmann was just a "box" it did not disclose an equivalent structure, runs counter to LBC's contention that the ICs contained in the ULT products use a structure equivalent to the control means in the '529 patent. *Id.* LBC responds that Dr. Zane clearly testified that JP '799 does not anticipate any of the asserted claims because it does not teach the control means limitation. *See* LBC's Resp. ULT's JMOL 20, ECF No. 247.

ULT's contention that Dr. Zane's testimony regarding the "black box" displayed in JP '799 runs counter (or is logically inconsistent) with LBC's infringement contentions regarding the ICs in the accused products ignores the substantial differences between the testimony of Dr. Roberts (on the ICs) and Giesselmann on the "black box." Neither Giesselmann nor ULT presented evidence as to the structure, makeup, or precise function of the "black box." In contrast, Dr. Roberts explained precisely what the "box" on the accused products was (an IC), what it represented, how it worked, and how it performed the identical function of the control means. The contrast in the extent and quality of the testimony on these "boxes" is stark, and ULT creates a false contradiction in seeking to compare them.

Indeed, Dr. Zane's testimony underscores these differences. As Dr. Zane noted, the means for initiating the oscillations in JP '799 is "an empty box." *See* App. Supp. LBC's Resp. ULT's JMOL 265, ECF No. 247. He stated that while he could "insinuate" or "imagine" the makeup and

nature of the box, “there is just no[t] sufficient detail included in this patent” to actually compare it to the ‘529 patent. *Id.* at 265-66. He then testified that he could not determine if the box represented an IC, microcontroller, or series of specially designed electrical component. *Id.*

Given the paucity of testimony regarding the manner in which JP ‘799 teaches the “control means” limitation of the ‘529 patent, the Court finds that the jury’s verdict not finding invalidity is supported by substantial evidence.

6. Marking Requirement

ULT contends that no reasonable jury could find that it is more probable than not that the licensees of the ‘529 patent complied with the marking statute, precluding LBC from collecting damages for the time prior to when ULT was given actual notice that it was alleged to infringe the ‘529 patent. *See Br. Supp. ULT’s JMOL 23-25, ECF No. 246.*

Under 35 U.S.C. § 287(a), a patentee or licensee selling a patented product must mark that product as patented to put the public on notice. “In determining whether the patentee marked its products sufficiently to comply with the constructive notice requirement [of § 287(a)], the focus is not on what the infringer actually knew, but on whether the patentee’s actions were sufficient in the circumstances, to provide notice *in rem*.¹¹ *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1446 (Fed. Cir. 1998) (citing *Amsted Indus. v. Buckeye Steel Castings*, 24 F.3d 178, 187 (Fed. Cir. 1994)). “Thus the statute defines that “[a patentee] is entitled to damages from the time when it either began marking its product in compliance with section 287(a)[, constructive notice] or when it actually notified [the accused infringer] of its infringement, whichever was earlier.”¹² *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1111 (Fed. Cir. 1996) (quoting *Am. Med. Sys., Inc. v. Med. Eng’g Corp.*, 6 F.3d 1523, 1537 (Fed. Cir. 1993)). The patentee must prove compliance with the marking statute by a

preponderance of the evidence. *Id.* “Compliance with section 287(a) is a question of fact,” reviewed for substantial evidence. *Id.*

“[L]icensees . . . and other authorized parties . . . must also comply” with the marking requirements of § 287(a). *Id.* “However, with third parties unrelated to the patentee, it is often more difficult for a patentee to ensure compliance with the marking provisions.” *Id.* “Therefore, when third parties are involved, the number of [items] sold without proper marking is not conclusive of the issue [of] whether the patentee’s marking was ‘substantially consistent and continuous.’” *Id.* Rather, “[w]hen failure to mark is caused by someone other than the patentee, the court may consider whether the patentee made reasonable efforts to ensure compliance with the marking requirements.” *Id.* at 1112.

ULT contends that LBC did not present sufficient evidence of consistent and continuous marking. *See* Br. Supp. Ult’s JMOL 24, ECF No. 246. According to Ult, the “scant and conclusory” evidence proffered by LBC during trial cannot show substantial and continuous marking. According to Ult, Mr. Bobel’s testimony and the presentation of one marked Robertson electronic ballast fails as a matter of law. *Id.* LBC responds that the jury heard “ample” evidence that Bobel complied with the marking requirements. *See* LBC’s Resp. Ult’s JMOL 23, ECF No. 247. Specifically, LBC notes that Bobel’s license with Robertson Transformer Company (“Robertson”) provided for marking, that Bobel testified that he required and policed marking of such products, and that in support of such testimony Bobel presented a marked Robertson ballast. *Id.* Lastly, LBC cites a 2008 letter from Bobel to Robertson terminating their license agreement, in which Bobel identified unpaid royalties as the sole reason for Robertson’s default under the agreement. *Id.*

ULT relies on an unpublished Federal Circuit decision, *K&K Jump Start/Chargers, Inc. v. Schumacher Electric Corp.*, 52 F. App'x 135 (Fed. Cir. Nov. 25, 2002), for the proposition that LBC's evidence of marking was insufficient as a matter of law. In *K&K Jump Start*, the court reviewed the district court's refusal to grant judgment as a matter of law that the plaintiff (K&K) was only entitled to damages from after the date the suit was filed. 52 F. App'x at 141. The patentee had licensed the patent at issue to a licensee, who agreed to mark any products in accordance with § 287(a) in their licensing contract. *Id.* "Although there was a provision in the contract between K&K and Century[, the licensee,] requiring marking, K&K took *no steps* to determine if Century was actually marking the products until after the start of the current litigation." *Id.* The *K&K Jumpstart* court held that the district could should have granted judgment in the defendant's favor that K&K failed to comply with the marking requirements. *Id.* However, the court continued, noting that "[w]e do not hold that bare evidence of a contractual provision requiring marking can never constitute reasonable efforts by the patentee to ensure that a licensee is marking the products properly, but under the circumstances here the jury's conclusion that K&K has met its burden to show compliance is not supported by substantial evidence." *Id.*

Despite ULT's insistence to the contrary, LBC presented substantially more evidence than the plaintiff in *K&K Jumpstart*. In *K&K Jumpstart*, the plaintiff submitted "bare evidence of a contractual provision requiring marking." *Id.* While the Federal Circuit noted the importance of such a provision, the court nonetheless held that the "bare" provision was insufficient based on the facts in that case. *Id.* In addition to marking provisions in each licensing contract, LBC also presented testimony from Bobel that he consistently policed marking at Robertson. Moreover, LBC bolstered such evidence by presenting a Robertson electronic ballast containing a mark identifying

the ‘529 patent. This array of evidence stands in marked contrast to the “bare contractual provision” solely relied on by the plaintiff in *K&K Jumpstart*. LBC presented a contractual provision bolstered by Bobel’s undisputed testimony, and an electronic ballast actually bearing the mark of the ‘529 patent. Moreover, any alleged failure to mark would have been caused by someone other than the patentee, so the Court must look to evidence of diligence on the part of the patentee rather than relying purely upon evidence of actual marking. *Cf. Maxwell*, 86 F.3d at 1111-12.

Accordingly, considering the undisputed evidence of marking in the light most favorable to the non-movant, the Court finds that there was clear and substantial evidence sufficient to support the jury’s verdict of marking.

7. Damages

ULT seeks judgment that the “3,000,000.00” written by the jury on the jury verdict form represents a lump sum royalty payment. *See* Br. Supp. ULT’s JMOL 21, ECF No. 246. ULT contends that based on the evidence adduced at trial, and counsel for LBC’s refusal to allow the jury to indicate whether any damages award represented a lump sum or running royalty, the Court should find that the damages award in the instant case represents a lump sum royalty payment. *Id.* at 21-23. LBC responds that the weight of the evidence supports deeming the damages award a running royalty rate based on the multiple running royalty licenses LBC presented to the jury. *See* LBC’s Resp. ULT’s JMOL 20, ECF No. 247. Moreover, LBC rejects ULT’s contention that it refused ULT’s efforts to clarify the jury form, contending that ULT’s alleged efforts amounted to “a thinly veiled attempt to have the jury render a verdict that would cover future infringement.” *Id.* at 20-21. LBC also moves this Court, in both its Response and in its Motion for Entry of Judgment, to enter a permanent injunction against ULT, arguing that the damages award represents a running royalty

for those infringing goods sold before trial. *Id.* at 21.

“A patentee is entitled to ‘damages adequate to compensate for infringement, but in no event less than a reasonable royalty.’” *Worldtech Sys. Inc. v. Integrated Networks Solutions, Inc.*, 609 F.3d 1308, 1319 (Fed. Cir. 2010) (quoting 35 U.S.C. § 284). In assessing a damages award, “a court must ask, “[H]ad the Infringer not infringed, what would [the] Patent Holder[] have made?”” *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009) (quoting *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507 (1964)). “The burden of proving damages falls on the patentee.” *Id.* “A reasonable royalty can be calculated from an established royalty, the infringer’s profit projections for infringing sales, or a hypothetical negotiation between the patentee and infringer based on the factors in *Georgia-Pacific*.” *Id.* (citing *Lucent Techs. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009)). “The hypothetical negotiation ‘attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began,’ and ‘necessarily involves an element of approximation and uncertainty.’” *Worldtech*, 609 F.3d at 1320 (quoting *Lucent*, 580 F.3d at 1324-25). Such a negotiation can result in either a running royalty rate, or a lump-sum royalty payment. *See Lucent*, 580 F.3d at 1325.

In this case, the verdict form question under Damages asked: “What sum of money, if any, do you find from a preponderance of the evidence is adequate to compensate Plaintiff for Defendant’s conduct that you found to infringe? Provide the amount, if any, in dollars and cents.” *See* Jury Charge 26, ECF No. 241. On the line below this question, the foreman wrote “3,000,000.00.” *Id.* During the charge conference, counsel for ULT argued that “we should have some way for the jury to tell us what type of award they’re giving.” *See* App. Supp. ULT’s JMOL

304, ECF No. 246. Counsel for LBC responded that they were not seeking, and the jury could not award, “future damages” meaning no further instruction was necessary.” *Id.* at 305. The Court declined to add the additional instruction. *Id.* at 311-13. However, as anticipated by counsel for ULT, the parties now debate the import of the jury’s damages award.

In *Telecordia Technologies, Inc. v. Cisco Systems, Inc.*, the Federal Circuit dealt with a similarly ambiguous jury verdict. 612 F.3d 1365, 1378 (Fed. Cir. 2010). In that case, the defendant appealed the district court’s damages decision that the notation “\$6,500,000 (6.5 MIL)” only compensated the plaintiff for past infringement. *Id.* Reviewing the district court’s decision, the Federal Circuit stated that the “verdict form is unclear whether the jury compensated Telecordia only for Cisco’s past infringement or for both past and ongoing infringement.” *Id.* Cisco argued that the award represented “a paid-up, lump-sum licensing fee.” *Id.* at 1377-78. The appellate court noted that “[d]istrict courts have broad discretion to interpret an ambiguous verdict form” and are in the best “position to assess whether the verdict figure represented past infringement as well as ongoing infringement.” *Id.* at 1378. In *Telecordia*, the jury award was closer to the amount proposed by Cisco than the award proposed by Telecordia, but neither party had proposed the 6.5 million. *Id.* Ultimately, the Federal Circuit held that the district court’s decision was not clearly erroneous.

Looking to the evidence adduced at trial, Bobel clearly enunciated a preference for a lump-sum payment, even when those payments were accompanied by running royalty rates. ULT presented evidence through Mr. Milani that the result of a hypothetical negotiation would be a \$1.5 million lump-sum royalty payment licensing the patent to ULT through its expiration. In contrast, LBC’s expert, Mr. Gallagher, proposed damages awards based on various running royalty rates, including 4.5%, 6.5% and 7.5%. See App. Supp. ULT’s JMOL 131-33, ECF No. 246. These

royalty rates, applied to ULT sales of accused products through April 30, 2011, result in proposed damages awards of \$9.3 million, \$13.5 million, and \$15.6 million. *Id.* Moreover, Mr. Gallagher specifically testified that, in his opinion, the appropriate damages award “would be something towards the higher end.” *Id.* at 133. Indeed, Mr. Gallagher opined that, in the jury’s position, he would apply a running royalty rate of 6%, resulting in a damages award for past infringement equaling \$12,943,000. *Id.* LBC argues that, despite this discrepancy, the Court should consider the quantity of running royalty rate-based licenses LBC presented to the jury. *See* LBC’s Resp. ULT’s JMOL 21, ECF No. 247 (“LBC presented the jury with evidence of multiple licenses that relied on a running royalty rate.”). LBC argues that ULT “attempts to ignore the thrust of these licenses by only considering their upfront payment provisions.” *Id.* To the contrary, ULT focuses on those provisions because they underscore Bobel’s testimony regarding the importance of up front, lump-sum royalty payments. These provisions, in conjunction with Bobel’s testimony, make it more likely than not that Bobel would have entered into a lump-sum license agreement in the hypothetical negotiation.

Accordingly, given the evidence adduced at trial, the similarity between the damages verdict and ULT’s damages position, the extremely close similarity to the TCP license entered into by Bobel, and the emphasis Bobel admittedly placed on lump-sum payments, the Court finds that the ambiguous damages verdict of “3,000,00.00” should be construed to represent a lump-sum royalty payment, which would grant ULT a license to use the ‘529 patent from the date of entry through the expiration of the patent.

IV. MOTION FOR ENTRY OF JUDGMENT

LBC filed a motion for entry of judgment seeking: 1) an award of prejudgment and post-

judgment interest and entry of the \$3,000,000.00 damages award; 2) a finding that this is an exceptional case under 35 U.S.C. § 285 on the basis of ULT's litigation misconduct, justifying an award of attorney's fees; 3) a permanent injunction barring ULT from continuing to infringe claims 1, 2 and 5 of the '529 patent; and 4) a declaration stating that the '529 patent is infringed and valid.

See LBC's Mot. Entry Judgment 1, ECF No. 244.

Preliminarily, pursuant to the Court's finding that the damages verdict of \$3,000,000.00 represents a lump-sum royalty agreement, LBC's request for a permanent injunction is **DENIED**. Under the Court's construction of the ambiguous jury verdict, the parties of the hypothetical negotiation agreed on a \$3,000,000.00 lump-sum payment in return for a license to practice the '529 patent through the patent's expiration. Accordingly, despite the Court upholding the finding of infringement, there is no basis for a permanent injunction as the damages cover ULT's licensing through the expiration of the patent in 2013. Moreover, as noted by ULT, LBC seeks entry of a declaratory judgment pursuant to ULT's counterclaim for declaratory judgment. *See* LBC's Mot. Entry Judgment 16, ECF No. 244. LBC never pled, and has never pled, a claim for declaratory relief. Further, such a request, in addition to being untimely post-trial was also rendered moot by the verdict. LBC did not respond to ULT's arguments in its Reply. *See* LBC's Reply, ECF No. 250. Accordingly, LBC's request for entry of declaratory relief is **DENIED** as untimely and moot.

Having dealt with the above issues, the Court will now consider LBC's request for prejudgment and post-judgment interest, and LBC's contention that this is an exceptional case justifying an award of attorney's fees.

1. Interest

LBC seeks an award of prejudgment and post-judgment interest applied to the damages

verdict at the current statutory rate of 5%. *See* LBC's Mot. Entry Judgment 1-4, ECF No. 244. ULT responds that the Court should deny or limit LBC's request for prejudgment interest based on the undue delay in commencing the instant suit, and that such interest should be calculated using the U.S. Treasury Bill rate ("T-rate"), compounded annually. *See* ULT's Resp. LBC's Mot. Entry Judgment 19-20, ECF No. 249. ULT further argues that LBC proposes a post-judgment interest rate at variance with current law. *Id.* at 24.

Section 284 of the Patent Act provides that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for infringement . . . together with interest and costs as fixed by the court." 35 U.S.C. § 284. "[P]rejudgment interest should ordinarily be awarded where necessary to afford the plaintiff full compensation for the infringement." *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655 (1983). "In the typical case an award of prejudgment interest is necessary to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement." *Id.* (citing *Waite v. United States*, 282 U.S. 508, 509 (1933)). "An award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also of the foregone use of the money between the time of infringement and the date of the judgment." *Id.* at 655-56.

"[P]rejudgment interest should ordinarily be awarded absent some justification for withholding such an award." *Id.* at 657. "[I]t may be appropriate to limit prejudgment interest, or perhaps deny it altogether, where the patent owner has been responsible for undue delay in prosecuting the lawsuit." *Id.* "The appropriate interest rate is within the discretion of the court, and may be fixed at the statutory rate or at the higher prime rate or corporate bond rate, according to the

circumstances.” *Kerwit Med. Prods., Inc. v. N&H Instruments, Inc.*, 224 U.S.P.Q 679, 691 (N.D. Tex. 1984) (citing *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 556-57 (Fed. Cir. 1984)). “[T]he determination whether to award simple or compound interest similarly is a matter largely within the discretion of the district court.” *Gyromat Corp.*, 735 F.2d at 557.

ULT first argues that the Court should deny or limit any award of prejudgment interest based on LBC, or its predecessor-in-interest’s, undue delay in bringing the instant suit. *See* ULT’s Resp. LBC’s Mot. Entry Judgement 19, ECF No. 249. As ULT notes, it may be appropriate to limit or deny prejudgment interest where the patent owner unduly delays prosecuting the lawsuit, unjustifiably inflating the damages award. *Id.* at 19-20. ULT argues that LBC’s predecessor-in-interest, Mr. Bobel, unnecessarily delayed bringing this suit. *Id.* at 21. It is undisputed that by 2005, Mr. Bobel asserted that several ULT products infringed the ‘529 patent. *Id.* ULT, through their counsel Mr. Mark Patterson, replied to Mr. Bobel in 2006, informing him that ULT contended that it did not infringe the ‘529 patent and that the patent was invalid. *Id.* The instant suit was not filed until February 24, 2009, almost three years after ULT responded to Bobel’s letter. *See* Orig. Compl., ECF No. 1. ULT argues that this nearly three-year delay justifies denying or limiting an award of prejudgment interest. *See* ULT’s Resp. LBC’s Mot. Entry Judgment 21, ECF No. 249. ULT also argues that Bobel’s justification for the delay, that he was “busy,” does not suffice in light of the prejudice it worked on ULT. *Id.*

LBC responds by pointing to Bobel’s actions between Mark Patterson’s response letter and the initiation of this action nearly three years later. *See* LBC’s Reply 2, ECF No. 250. Bobel received ULT’s letter containing its non-infringement and invalidity positions in late 2006. *Id.* Subsequently, Bobel contacted Acacia in 2007. *Id.* After prolonged negotiations with Acacia,

Bobel negotiated an agreement regarding a license to the '529 patent in 2008. *Id.* Acacia then formed LBC, which instituted the current suit at the beginning of 2009. *Id.* While ULT contends that the nearly three-year delay constitutes an undue delay, resulting in unfair prejudice, the Court finds that both Bobel and LBC diligently worked to bring the current suit. In *Devex* the Supreme Court held that prejudgment interest is the norm, but that it could be denied or limited when "the patent owner has been responsible for undue delay in prosecuting the lawsuit." *Devex*, 461 U.S. at 657. In this case, leaving aside the length of the alleged undue delay relative to ULT's history of infringement, the Court notes Bobel's apparent diligence in attempting to secure a means of bringing an effective suit against ULT. Indeed, as ULT is well aware, this suit was initially instituted against several large, powerful corporations. Accordingly, Bobel's quick move to contact Acacia, negotiations with Acacia, the subsequent formation of LBC, and LBC's almost immediate move to file suit does not show an owner responsible for a delay. Rather such actions comport with a patent owner diligently seeking an effective means to challenge a host of large, wealthy corporations, having already put such corporations on notice regarding his infringement contentions. Considering these facts and the strong presumption in favor of a grant of prejudgment interest, the Court finds that an award of prejudgment interest is appropriate in this case.

After careful review of the parties' positions regarding the appropriate prejudgment interest rate, the Court finds that prejudgment interest should be calculated using the state statutory rate of 5%, compounded annually. Such interest is ordinarily awarded from the date of infringement until the entry of judgment. *See Nickson Indus. v. Rol Mfg. Co.*, 847 F.2d 795, 800 (Fed. Cir. 1988). Accordingly, per the unchallenged calculations contained in LBC's Motion, the interest total equals \$1,543,479.20, bringing the total award to \$4,543,479.20. *See* LBC's Mot. Entry J. 4, ECF No. 244.

Post-judgment interest shall be calculated at the rate set by 28 U.S.C. § 1961 as of the date judgment is entered in this action, compounded annually.

2. Attorney's Fees

LBC also seeks a finding that this is an “exceptional case” under 35 U.S.C. § 285, justifying an award of attorney’s fees. *See* LBC’s Mot. Entry Judgment 4, ECF No. 244. LBC bases its contention that the current case is “exceptional” on four allegations of litigation misconduct: 1) ULT blatantly violated the Court’s October 16, 2009 order requiring document production; 2) ULT produced the “Hesterman Notebook” in an untimely fashion, and produced the remaining “Hesterman Documents” less than 30 days before trial; 3) ULT deliberately attempted to “dupe” LBC and its own expert with a non-representative product; and 4) ULT “shielded” an “unqualified” investigator who destroyed documents from being its 30(b)(6) representative. *Id.* at 4-13. ULT responds that LBC fails to use the proper governing standard, that ULT committed no “litigation misconduct,” and that even assuming such misconduct other factors compel rejection of LBC’s request for exceptional case treatment. *See* ULT’s Resp. LBC’s Mot. Entry Judgment 1-13, ECF No. 249.

“The district court may, in ‘exceptional’ cases, award reasonable attorney fees to the prevailing party.” *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1467-68 (Fed. Cir. 1997) (citing 35 U.S.C. § 285). “The decision whether to award fees is a two-pronged inquiry that requires, first, a factual finding that the case is ‘exceptional’ and, second, a discretionary decision to award fees.” *Id.* at 1468 (citing *Reactive Metals & Alloys Corp. v. ESM, Inc.*, 769 F.2d 1578, 1582 (Fed. Cir. 1985)). “Bad faith and willful infringement are not the only criteria whereby a case may be deemed ‘exceptional,’ although when either is present the requirement is more readily met.

Litigation misconduct and unprofessional behavior are relevant to the award of attorney fees, and may suffice to make a case exceptional under § 285.” *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1574 (Fed. Cir.1996). “It is the judicial duty to refuse to condone behavior that exceeds reasonable litigation tactics.” *Id.* at 1575. However, “the court may consider the litigation actions of both sides in connection with § 285.” *Id.*

LBC’s primary evidentiary support for the request for fees stems from ULT’s failure to produce documents timely in accordance with the Court’s October 16, 2009 Order. *See* LBC’s Mot. Entry Judgment 6-7, ECF No. 244. According to LBC, even five months after the December 13, 2009 deadline set by the Court, ULT had only produced 259 pages of material and had refused to produce any product samples unless LBC agreed to pay for such samples. *Id.* at 6. Moreover, according to LBC, thousands of documents were not produced until 14-16 months after the Court’s December 13, 2009 deadline. *Id.* LBC emphasizes that these actions were part of a pattern of delay, which forced LBC to file an Emergency Motion to Modify the Scheduling Order to seek relief from certain deadlines and to compel ULT to produce key documents. *Id.* at 7. More specifically, LBC accuses ULT of delaying in producing the “Hesterman Notebook,” and subsequent “Hesterman Documents” to LBC’s detriment. *Id.* LBC contends that “had it not been for a chance encounter” between Hesterman and LBC’s expert Dr. Zane at a conference, “LBC would never have seen these documents.” *Id.* at 8.

LBC then moves on to allege that ULT deliberately attempted to “dupe” the Court and its own expert by using a non-representative product sample. *Id.* LBC argues that ULT’s choice of C2642, Generation E, as the representative product for CFL Group 1 constitutes litigation misconduct because the product did not perform like other products it supposedly represented. *Id.*

Then, when further testing was required due to the performance of the product, ULT sought to exclude such testing. *Id.* at 9. Lastly, LBC contends that ULT shielded Travis Berry, an “unqualified” investigator responsible for the illicit destruction of documents, from acting as ULT’s 30(b)(6) representative. *Id.*

ULT contends that it committed no litigation misconduct. *See* ULT’s Resp. LBC’s Mot. Entry Judgment 4, ECF No. 249. As to the alleged discovery misconduct, ULT argues that in its initial document production it produced schematics for virtually all of the accused products and data sheets for virtually all of the ICs. *Id.* ULT then states that in May 2010, ULT produced 20,000 additional pages of documents. *Id.* After the Court’s revised claim construction, ULT produced even more documents in advance of the discovery deadline. *Id.* at 4-5. Responding to the emergency motion relied on by LBC, ULT states that in that motion LBC incorrectly claimed that ULT had yet to produce schematics, but counsel for ULT explained that the schematics had been produced in December 2009. *Id.* at 5.

Moving to the “Hesterman Documents,” ULT avers that LBC’s account of their production “is pure fiction.” *Id.* ULT contends that there was “no causal relationship” between Dr. Zane’s meeting with Mr. Hesterman and the subsequent production of the “Hesterman Documents.” *Id.* ULT states that in preparation for trial, ULT’s counsel contacted Mr. Hesterman to gauge his potential availability for trial, realized he may possess relevant documents, and produced those documents in strict compliance with their disclosure obligations. *Id.* at 5-6. Turning to the allegedly deceptive CFL Group 1 representative product, ULT contends that each of LBC’s many accusations “is flat-out false.” *Id.* at 6. ULT contends that LBC actually proposed use of the subject product, and that LBC did so with full knowledge of how it worked and as to how it is different from other

CFL Group 1 products. *Id.* According to ULT, Dr. Roberts tested a different CFL Group 1 product, resulting in different test results. *Id.* Moreover, ULT disputes LBC's claim that the product is "defective," noting that the ballasts tested by Mr. Burke and Dr. Roberts date from 2007, over two years after the subject product's defect was discovered and corrected. *Id.* at 7-8.

Next, ULT takes issue with LBC's attempts to "disparage" Mr. Berry as "unqualified." *Id.* at 8. ULT argues that it did not "shield" Mr. Berry, listing him on the first page of each witness list and disclosing that he made determinations for ULT regarding the '529 patent. *Id.* at 9. Moreover, regarding the issue of a deposition, ULT notes that LBC never requested such a deposition even after Mr. Poehlman testified at his deposition that Mr. Berry had led the investigation into the accused products and the '529 patent. *Id.*

ULT also argues that LBC's own misconduct weighs against deeming this an "exceptional case" and granting an award of attorney's fees. *Id.* at 10. ULT contends that LBC refused to drop meritless claims in a timely manner, engaging both parties and the Court in vexatious litigation on frivolous claims. *Id.* at 11. Further, LBC filed untimely contentions and expert opinions, including an attempt to disclose an entirely new opinion regarding the Linear Group 3 ballasts in open court. *Id.* at 12. ULT also highlights the alleged misstatements in LBC's Motion for Entry of Judgment as evidence of LBC's own misconduct. *Id.*

Reviewing the extant evidence regarding ULT's alleged litigation misconduct, the Court finds insufficient evidence to deem this case "exceptional." To the extent such conduct exists, specifically in the form of dilatory production, the Court finds such delayed production counterbalanced by LBC's delay in producing contentions and their virtually rolling additions to Dr. Roberts' expert report. As for the remaining grounds, the Court finds that none of them are well

taken. The “Hesterman Documents” came to light before trial, and ULT produced them almost immediately. There is no evidence that Mr. Berry was shielded from LBC, and LBC freely and consistently argued to the jury that Mr. Berry was unqualified. LBC’s allegations that Mr. Berry destroyed documents illicitly or inappropriately formed the basis of their requested spoliation instruction, which the Court denied. The rhetoric regarding Mr. Berry’s allegedly improper destruction of documents is simply not borne out by the facts. Turning to the CFL Group 1 representative product, the Court finds that the evidence adduced at trial clearly showed that the defect in the representative product came to light, and was fixed, in 2005. While LBC continuously argued to the jury that ULT had duped everyone, their own expert included, in arguing for a finding of wilfullness, the jury was apparently not convinced. Neither is the Court. The record clearly shows that the parties were on notice regarding the nature of the representative product, and that the fixed defect had no bearing on any tests.

In sum, the overblown rhetoric LBC used in trial, and again in their briefs seeking fees, simply does not accord with the parties’ actual conduct during the course of this litigation. As such, the Court declines to deem this case “exceptional” and, accordingly, denies LBC’s request for fees.

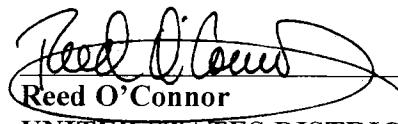
V. CONCLUSION

Accordingly, ULT’s Motion for Judgment as a Matter of Law should be and is hereby **DENIED**, and LBC’s Motion for Entry of Judgment is **GRANTED** in part and **DENIED** in part.

It is therefore **ORDERED** that the damages verdict of \$3,000,000.00 stands and represents a lump-sum royalty payment. It is further **ORDERED** that the Court awards prejudgment interest from the date of first infringement at the Texas statutory rate of 5%, compounded annually, amounting to \$1,543,479.20, bringing the total award to \$4,543,479.20, and post-judgment interest

from the date of judgment at the rate set by 28 U.S.C. § 1961.

SO ORDERED on this **26th day of August, 2011.**


Reed O'Connor
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
WICHITA FALLS DIVISION

LIGHTING BALLAST CONTROL, §
LLC, §
§
Plaintiff, §
§
v. § CIVIL ACTION NO. 7:09-CV-29-O
§
PHILIPS ELECTRONICS NORTH §
AMERICA CORP., et al., §
§
Defendants. §

ORDER

Before the Court is Plaintiff Lighting Ballast Control, LLC's Emergency Motion for Reconsideration and Clarification (ECF No. 173), Defendant Universal Lighting Technologies, Inc.'s Opposition (ECF No. 179), and Plaintiff's Reply (ECF No. 181) and Appendix in Support (ECF No. 182). Also before the Court is Defendant Universal Lighting Technologies, Inc.'s Motion for Reconsideration (ECF No. 176) and Brief in Support (ECF No. 177), Plaintiff Lighting Ballast Control, LLC's Response (ECF No. 184), and Defendant's Reply (ECF No. 185). Having considered the briefs and the applicable law, the Court finds that Plaintiff's motion should be and is hereby **GRANTED** in part and **DENIED** in part, and that Defendant's motion should be and is hereby **DENIED**.

Plaintiff seeks reconsideration of this Court's May 4, 2011 Order granting in part Defendant's motion for summary judgment and dismissing Plaintiff's Doctrine of Equivalents theory from the case. *See* ECF No. 172. Plaintiff contends that the infringement contentions deadline upon which the Court relied had been vacated by prior order. *See* ECF No. 173. Plaintiff also seeks clarification of the Court's May 4, 2011 Order. *Id.* at 5. Plaintiff contends that even if the Court

Certified a true copy of an instrument
on file in my office on 10/05/2011
Clerk, U.S. District Court,
Northern District of Texas

Andrea Beck Young Deputy

excludes Plaintiff's Doctrine of Equivalents theory from the case, several dismissed products in Groups 5 and 8 literally infringe and should remain in the case. *Id.* Defendant also seeks reconsideration and clarification of this Court's May 4, 2011 order. *See* ECF No. 176.

I. FACTUAL & PROCEDURAL BACKGROUND

At issue in this case is United States Patent 5,436, 529 ("‘529 Patent") issued on July 25, 1995, and entitled "CONTROL AND PROTECTION CIRCUIT FOR ELECTRONIC BALLAST." *See* Summ. J. Order 1, May 4, 2011, ECF No. 172. Plaintiff Lighting Ballast Control, Inc. ("LBC") holds the exclusive right to enforce the ‘529 Patent. *Id.* The ‘529 Patent covers a lighting ballast that powers fluorescent lamps with heatable filaments. *Id.* at 2. An electronic ballast practicing the ‘529 Patent operates in three different stages: (1) the initial state-up of the ballast, (2) the shut-down or sleep-mode of the ballast, and (3) the re-starting of the ballast after an inoperable lamp has been replaced. *Id.*

LBC instituted this action against Defendant Universal Lighting Technologies, Inc. ("ULT") for infringement of the ‘529 Patent. *Id.* LBC identifies more than thirty allegedly infringing product schematics. *Id.* ULT has grouped the accused products into fourteen groups on the basis of differences in LBC's infringement analysis, as well as differences in the structure and operation of the accused products. *Id.* On February 25, 2011, ULT moved for summary judgment on the grounds that the accused products did not infringe the ‘529 Patent and that the ‘529 patent was invalid as a matter of law. *See* ECF No. 126. On May 4, 2011 the Court granted in part and denied in part ULT's motion for summary judgment. *See* Summ. J. Order 1, May 4, 2011, ECF No. 172. The Court granted ULT's motion with respect to Claims 3, 4, and 18 of the ‘529 patent and with respect to all products in Groups 5, 7, 8, and 9. *Id.* The Court denied ULT's motion on all other grounds. *Id.*

On May 6, 2011, LBC filed its Emergency Motion for Reconsideration and Clarification. LBC contends that the Court’s dismissal of LBC’s Doctrine of Equivalents (“DOE”) theory from the case was in error because it was based upon an improper reading of LBC’s scheduling obligations. *See* Pl.’s Mot. Reconsideration & Clarification 1, ECF No. 173. LBC further contends that even if the Court denies reconsideration of LBC’s DOE infringement theory, several products in Groups 5 and 8 literally infringe the ‘529 patent and therefore should not have been dismissed from the case on the basis of the Court’s dismissal of LBC’s DOE contentions. *Id.* at 5.

II. LEGAL STANDARD

Rule 54(b) provides that “any order or other decision . . . that adjudicates fewer than all the claims or the rights and liabilities of fewer than all the parties . . . may be revised at any time before entry of” a final judgment. *See Fed. R. Civ. P. 54(b)*. “Although the precise standard for evaluating a motion to reconsider under Rule 54(b) is unclear, whether to grant such a motion rests within the discretion of the court.” *Dos Santos v. Bell Helicopter Textron, Inc. Dist.*, 651 F. Supp. 2d 550, 553 (N.D. Tex. 2009) (Means, J.). The district court’s discretion in this respect is broad. *Calpecto 1981 v. Marshall Exploration, Inc.*, 989 F.2d 1408, 1414-15 (5th Cir. 1993). Such a motion requires the court to determine “whether reconsideration is necessary under the relevant circumstances.” *Judicial Watch v. Dep’t of the Army*, 446 F. Supp. 2d 112, 123 (D.D.C. 2006) (citation and internal quotation marks omitted). Even though the standard for evaluating a motion to reconsider under Rule 54(b) “would appear to be less exacting than that imposed by Rules 59 and 60 . . . considerations similar to those under Rules 59 and 60 inform the Court’s analysis.” *Dos Santos*, 651 F. Supp. 2d at 553.

However, “[b]ecause the denial of a motion for summary judgment is an interlocutory order, the trial court is free to reconsider and reverse its decision for any reason it deems sufficient, even

in the absence of new evidence or an intervening change in or clarification of the substantive law.”

Lavespere v. Niagara Mach. & Tool Works, Inc., 910 F.2d 167, 185 (5th Cir. 1990), *abrogated on other grounds*, *Little v. Liquid Air Corp.*, 37 F.3d 1069, 1075 n. 14 (5th Cir. 1994) (en banc) (analyzing a Rule 59(e) motion for reconsideration of an order granting a motion for summary judgment).

III. ANALYSIS

LBC seeks reconsideration of this Court’s dismissal of its DOE theory and, in the alternative, clarification from the Court regarding which products should be dismissed from the case on the basis of this Court’s dismissal of LBC’s DOE theory. *See* ECF No. 173.

1. LBC’s Request for Reconsideration

At summary judgment, ULT argued that the Court should strike LBC’s DOE infringement contentions because LBC failed to timely disclose their reliance on the DOE. *See* Summ. J. Order 18, May 4, 2011, ECF No. 172. The Court dismissed LBC’s DOE contentions, holding that LBC “utterly failed to comply with Northern District of Texas Miscellaneous Order No. 62, ¶¶ 3-1, 3-6.” *Id.* Those paragraphs require a party to disclose “specifically and in detail where each element of each asserted claim is found within each accused instrumentality” and “[w]hether each element of each asserted claim is claimed to be literally present or present under the doctrine of equivalents in the accused instrumentality.” *Id.* LBC filed its initial infringement contentions on September 11, 2009. *Id.* at 19. LBC never amended, or sought leave to amend, such infringement contentions. *Id.* LBC’s final infringement contentions were due on or before January 3, 2011, and no extension was ever sought or granted. The Court held that LBC failed to request leave to amend their infringement contentions in a timely fashion and failed to show good cause for their delay. *Id.* Accordingly, the Court held that LBC’s DOE infringement contentions should be struck from the

case. *Id.*

LBC now argues, for the first time, that the Court vacated all deadlines under Northern District Miscellaneous Order No. 62 (“Local Patent Rules”), relieving them of any obligation to amend their infringement contentions in a timely fashion. *See* Pl.’s Mot. Reconsideration & Clarification 1-4, ECF No. 173. LBC argues that in subsequent Scheduling Orders the Court vacated any and all deadlines, thus removing the Local Patent Rules from the case and any deadlines for amendment of their infringement contentions. *Id.* Accordingly, LBC contends that this Court dismissed their DOE infringement contentions based upon an “unspoken deadline.” *Id.* at 4.

As LBC notes, the Local Patent Rules are not binding on the Wichita Falls Division of the Northern District of Texas. In its October 16, 2009 Scheduling Order the Court incorporated by reference several portions of the Local Patent Rules, including the above-cited paragraphs governing presentation of the parties’ infringement contentions. *See* ECF No. 49. LBC was required to serve its preliminary infringement contentions on or before October 30, 2009. *Id.* The Court also incorporated by reference ¶¶ 3-6 and 3-7 of the Local Patent Rules, providing that “each party’s preliminary infringement contentions . . . shall be deemed the party’s final contentions” and “[a]ny motion for leave to amend these preliminary contentions must be filed within 30 days of the court’s final claim construction ruling.” *Id.* The Court did not subsequently relieve LBC of the requirement that they serve their preliminary infringement contentions on or before October 30, 2009. Nor did the Court’s subsequent orders eliminate its earlier order that “each party’s preliminary infringement contentions . . . shall be deemed the party’s final contentions.” *Id.* Accordingly, despite the Court’s elimination of future scheduling deadlines, LBC’s preliminary infringement contentions still constituted their final infringement contentions. As such, LBC was still required to amend their preliminary infringement contentions in order to include a DOE infringement contention, which they

failed to do in direct violation of the Court's October 16, 2009 Scheduling Order.

Moreover, LBC completely failed to present this argument to the Court during summary judgment. *See* Pl.'s Resp. Def.'s Mot. Summ. J., ECF No. 135. Instead, as they have done throughout the pendency of this case, LBC responded to ULT's motion as though the relevant sections of the Local Patent Rules applied. *See* Pl.'s Resp. Def.'s Mot. Summ. J., ECF No. 134. Indeed, as ULT notes, LBC informed ULT that they would need to seek leave to amend their invalidity contentions on January 20, 2011, four days before LBC served the expert report they allege constituted service of their final infringement contentions. *See* Def.'s Resp. Pl.'s Mot. Reconsideration & Clarification 8-9, ECF No. 179. LBC now requests that the Court re-interpret their obligations under the Court's October 16, 2009 Order and the Local Patent Rules and excuse their failure to amend their infringement contentions. The Court declines to do so.

Furthermore, not only has LBC misrepresented the state of their obligations under this Court's prior orders, as discussed above, but they waived any such argument by failing to present it during summary judgment. "The Fifth Circuit makes it clear that when a party does not address an issue in his brief to the district court, that failure constitutes a waiver on appeal." *Magee v. Life Ins. Co. of N. Am.*, 261 F. Supp. 2d 738, 748 n. 10 (S.D. Tex. 2003) (citing *Lookingbill v. Cockrell*, 293 F.3d 256, 264 (5th Cir. 2002)). "By analogy, failure to brief an argument in the district court waives that argument in that court." *Id.*; *see also Everest Indem. Ins. Co. v. Allied Int'l Emergency LLC*, No. 4:08-CV-678-Y, 2009 WL 2030421, at *6 (N.D. Tex. July 14, 2009) (Means, J.) ("Defendants do not argue that coverage exists under these provisions in their response. Thus, any argument by Defendants to that effect is waived."). LBC failed to present their instant scheduling argument during summary judgment in response to ULT's motion for summary judgment. As such, LBC has waived this argument.

Accordingly, the Court declines to reconsider its dismissal of LBC's DOE infringement contentions.

2. LBC's Request for Clarification

In the alternative, LBC requests clarification of the Court's May 4, 2011 Order and seeks an opportunity to meet and confer with ULT regarding which products in Groups 5 and 8 infringed solely under DOE and which infringed literally. *See* Pl.'s Mot. Reconsideration & Clarification 5, ECF No. 173. The Court dismissed all products in Groups 5 and 8 from this suit after dismissing LBC's DOE infringement theory from the case. LBC contends that "as ULT is well aware," it claims literal infringement for certain products in Groups 5 and 8.

LBC argues that their expert reports illustrate their plan to proceed on a theory of literal infringement for several products in Groups 5 and 8 and requests an opportunity to meet and confer with ULT to identify those products. ULT responds that the Court's May 4, 2011 Order does not require clarification because LBC disclosed only a DOE infringement theory for the products in Groups 5, 8, and 9. *See* Def.'s Resp. Pl.'s Mot. Reconsideration & Clarification 10, ECF No. 179. Specifically, ULT contends that Dr. Roberts' Expert Report does not disclose a literal theory of infringement for products in Groups 5, 8, and 9. *Id.* at 11. The Court finds ULT's reading of Dr. Roberts' report strained, at best. As noted by LBC, it is clear that when Dr. Roberts states "Yes" it indicates that a product literally infringes. This conclusion is bolstered by Dr. Roberts' further statement that certain products "also" infringe under DOE. The clear import of Dr. Roberts' Expert Report is that several of the products in Groups 5 and 8 were alleged to infringe under both a literal theory of infringement and under DOE.

Accordingly, the Court finds that LBC's request for clarification regarding the dismissal of

certain products in Groups 5 and 8 is well taken.

3. ULT's Request for Reconsideration

Defendant ULT seeks reconsideration of this Court's May 4, 2011 Order construing the term "direct current blocking means" and denying ULT's motion for summary judgment on the grounds that the '529 Patent is anticipated as a matter of law. The Court declines ULT's invitation to reconsider its prior Order.

IV. CONCLUSION

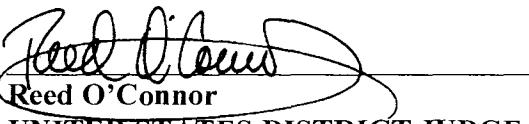
Accordingly, the Court finds that Plaintiff LBC's Motion for Reconsideration and Clarification should be **GRANTED** in part and **DENIED** in part. It is therefore **ORDERED** that Plaintiff LBC's request that the Court reconsider order dismissing LBC's DOE infringement contentions is **DENIED**.

It is further **ORDERED** that the parties must file a joint status report on the docket on or before **Wednesday, June 1, 2011**, identifying those products in Groups 5 and 8 for which LBC has alleged a claim of literal infringement.

It is further **ORDERED** that the parties must file a joint status report on the docket on or before **Friday, June 3, 2011**, identifying and listing all products for which LBC has alleged a claim of literal infringement.

Finally, it is further **ORDERED** that Defendant ULT's Motion for Reconsideration should be and is hereby **DENIED**.

SO ORDERED on this **25th** day of **May, 2011**.


Reed O'Connor
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
WICHITA FALLS DIVISION

LIGHTING BALLAST CONTROL, §
LLC, §
§
Plaintiff, §
§
v. § CIVIL ACTION NO. 7:09-CV-29-O
§
§
PHILIPS ELECTRONICS NORTH §
AMERICA CORP., et al., §
§
Defendants. §

SUMMARY JUDGMENT ORDER

Before the Court is Defendant Universal Lighting Technologies, Inc.'s ("ULT") Motion for Summary Judgment or Partial Summary Judgment (ECF No. 127), along with its supporting brief and appendix. Also before the Court is Plaintiff Lighting Ballast Control, LLC's ("LBC") response brief and appendix. The Court will also consider the parties' respective objections, responses, and replies thereto. ULT moves for summary judgment of non-infringement, invalidity of the asserted claims for anticipation, and invalidity for indefiniteness. LBC opposes summary judgment on all grounds. After considering the arguments of the parties, the evidence, and the applicable law, the Court will grant ULT's motion for summary judgment of non-infringement with respect to Claims 3, 4, and 18 and to all products in Groups 5, 7, 8, and 9. The Court will deny ULT's motion on all remaining grounds.

I. OVERVIEW OF THE '529 PATENT

At issue in this case is United States Patent 5,436,529 ("529 Patent") issued on July 25, 1995 and entitled "CONTROL AND PROTECTION CIRCUIT FOR ELECTRONIC BALLAST." Plaintiff LBC holds the exclusive right to enforce the '529 Patent. The inventor is

Certified a true copy of an instrument
on file in my office as: 10/05/2011 1
Clerk, U.S. District Court,
Northern District of Texas
Andrea Park Young

Andrzej “Andrew” Bobel. The ‘529 Patent covers a lighting ballast that powers fluorescent lamps with heatable filaments. An electronic ballast practicing the ‘529 Patent operates in three different stages: (1) the initial start-up of the ballast, (2) the shut-down or sleep-mode of the ballast, and (3) the re-starting of the ballast after an inoperable lamp has been replaced. Pl.’s Opening Br. Cl. Const. 4, ECF No. 84. The invention was intended to address significant technical challenges facing the ballast industry in 1993; specifically, how to preserve the integrity of the ballast by not drawing power from a power line source when a lamp is removed or defective, and by not having to turn the power OFF and ON when the lamp is replaced. *Id.* at 6. The invention covered by the ‘529 Patent was intended to remedy these issues in a safe, energy efficient, and affordable manner. *Id.*

LBC sues Defendant ULT claiming infringement of the ‘529 Patent because ULT manufactures, uses, or sells electronic ballasts utilizing circuitry that monitors the voltage across one or more lamps and provides end-of-life protection for multiple types of failures. Pl.’s Orig. Compl. 4, ECF No. 1. LBC identifies more than thirty allegedly infringing product schematics, several of which apply to more than one product or generation of products. ULT has grouped the accused products into fourteen groups, taking into account differences in LBC’s infringement analyses and differences in the structure and operation of the accused products. ULT denies any infringement and seeks a finding of non-infringement and invalidity of the asserted claims.

II. LEGAL STANDARDS

Summary judgment is appropriate “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). A dispute regarding a material fact is “genuine” where the evidence is such that a reasonable jury could return a verdict favor of the nonmoving party. *See Anderson v. Liberty*

Lobby, Inc., 477 U.S. 242, 248 (1986). In considering a motion for summary judgment, a court must view all inferences drawn from the factual record in the light most favorable to the nonmoving party. *See Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 587 (1986).

In a patent infringement case, a court first determines the proper construction of the patent claims by establishing, as a matter of law, the scope and boundaries of the subject-matter of the patent. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd*. 517 U.S. 370, 384-85 (1996). Second, the trier of fact compares the properly construed claims to the allegedly infringing device(s) and determines whether there has been an infringement. *Id.* Here, the latter question is at issue.

Pursuant to 35 U.S.C. § 112 ¶ 6 a patentee may express a claim limitation by reciting a function to be performed by a generic means, rather than reciting in the claim the actual structure for performing the particular function. Section 112, ¶ 6 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Section 112, ¶ 6 thus “operates to restrict claim limitations drafted in such functional language to those structures, materials, or acts disclosed in the specification (and their equivalents) that perform the claimed function.” *Personalized Media Comm'n, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 703 (Fed. Cir. 1999). “The point of the requirement that the patentee disclose particular structure in the specification and that the scope of the patent claims be limited to that structure and its equivalents is to avoid pure functional claiming.” *Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

Literal infringement of a properly construed claim is a question of fact. *See Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). A means-plus-function claim term will literally cover an accused device when the relevant structure in the accused device performs the identical function recited in the claim and that structure is identical or equivalent to the corresponding structure in the specification. *See Intellectual Sci. & Tech., Inc. v. Sony Elecs., Inc.*, 589 F.3d 1179, 1183 (Fed. Cir. 2009). The proper test for equivalent structure “is whether the differences between the structure in the accused device and any [structure] disclosed in the specification are insubstantial.” *Chiuminatta Concrete Concepts v. Cardinal Indus.*, 145 F.3d 1303, 1309 (Fed. Cir. 1998). An insubstantial change is one which adds nothing of significance to the structure, material, or acts disclosed by the specification. *See Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed. Cir. 1993). One way to approach the question of equivalency is to ask whether the structures perform the same function in substantially the same way to achieve substantially the same result. *See IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1437 (Fed. Cir. 2000). Known interchangeability between the structure in the accused device and the disclosed structure is also an important factor, although it is not dispositive. *See id.* at 1435; *see also The Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1324 (Fed. Cir. 2004).

The Federal Circuit has often applied a “reduced version” of the doctrine of equivalents test in the section 112, ¶ 6 context to determine whether the differences between the corresponding structure and the structure in the accused device are substantial. *See IMS Tech.*, 206 F.3d at 1437. As under the doctrine of equivalents, the context of the invention should be taken into account in the section 112, ¶ 6 equivalence analysis. *See id.* at 1436. According to the Federal Circuit:

[T]wo structures that are equivalent in one environment may not be equivalent in another. More particularly, when in a claimed “means” limitation the disclosed physical structure is of little or no importance to the claimed invention, there may be a broader range of equivalent structures than if the physical characteristics of the structure are critical in performing the claimed function in the context of the claimed invention. Thus, a rigid comparison of physical structures in a vacuum may be inappropriate in a particular case. Indeed, the statute requires two structures to be equivalent, but it does not require them to be “structurally equivalent,” i.e., it does not mandate an equivalency comparison that necessarily focuses heavily or exclusively on physical structure.

Id. Therefore, the importance of the corresponding structure to the claimed invention should be considered in the equivalency comparison. *See id.*

Most of LBC’s infringement contentions are based on a theory of literal infringement. However, with respect to accused products in Groups 5, 8, and 9, LBC asserts infringement under the doctrine of equivalents (“DOE”). ULT also seeks summary judgment on its counterclaims of invalidity of the asserted claims. The Court will address these matters below.

III. ANALYSIS

ULT moves for summary judgment against LBC as follows: (1) granting ULT a declaratory judgment counterclaim of non-infringement with respect to Claims 3, 4, and 18 of the ‘529 Patent and certain ULT products that LBC dropped from the case; (2) dismissing with prejudice all patent infringement claims against ULT and granting ULT’s declaratory judgment of non-infringement of the ‘529 Patent; and (3) ruling in favor of ULT’s first and third affirmative defenses and declaratory judgment of invalid for anticipation under 35 U.S.C. § 102 and invalid as indefinite. The Court will first address ULT’s motion with respect to LBC’s infringement claims, and secondly ULT’s invalidity arguments.

A. Infringement Claims

ULT first moves for summary judgment with regard to all infringement claims based on Claims 3, 4, and 18 of the ‘529 Patent. According to ULT, LBC’s expert on infringement, Dr. Roberts, has not offered any opinion related to these claims and admitted in his deposition that no ULT products infringe on these claims. Likewise, ULT argues that LBC has agreed that no Group 7 ULT products infringe on any asserted claims of the ‘529 Patent. LBC does not dispute that summary judgment is appropriate with regard to all infringement claims related to Claims 3, 4, and 18 and all infringement claims related to ULT’s Group 7 products. *See* Pl.’s Resp. Mot. Summ. J. 5, ECF No. 135 (“For those products that were initially accused of infringement but for which Dr. Roberts could not confirm infringement, those products have been dropped from this lawsuit.”). In any event, LBC has presented no evidence in response to ULT’s motion that any products infringe Claims 3, 4, and 18 or that any Group 7 products infringe any asserted claim of the ‘529 Patent. Therefore, summary judgment is appropriate with respect to any infringement claims based on these claims or products. Accordingly, the analysis below pertains only to LBC’s remaining infringement claims based on Claims 1, 2, and 5 of the ‘529 Patent.

ULT also seeks summary judgment with regard to LBC’s remaining claims of infringement of the ‘529 Patent. First, ULT argues that no accused product contains either the same or an equivalent structure as the claimed “control means” of Claim 1, which would also entitle ULT to summary judgment on dependent Claims 2 and 5. LBC agrees that the accused products do not contain the same structure and rests its infringement claims, with respect to the “control means” limitation, on an equivalent structure in the accused products. Specifically, ULT asserts that “LBC has not, and cannot, come forward with sufficient evidence to prove its infringement claim” because “Dr. Roberts’ equivalency opinion . . . (a) fails to specify what structures perform the ‘control means’ functions and why they are equivalent, (b) improperly

expands the scope of the claim to encompass *any* electronic circuit that performs the claimed functions, and (c) ignores Bobel's distinction between his invention and the prior art." Def.'s Br. Supp. Mot. Summ. J. 13, ECF No. 127 (emphasis in original). ULT also argues that its "products are substantially different from the claimed 'control means,' both in the way they operate and in the results obtained." *Id.* For these reasons, ULT argues, summary judgment of non-infringement is appropriate because the accused products do not contain an equivalent structure to the "control means" limitation of Claims 1, 2, and 5.

LBC disputes ULT's assertions with regard to the "control means" and argues that it has introduced sufficient evidence to raise a fact issue on infringement. LBC begins by criticizing ULT's component-by-component analysis, arguing that "ULT seeks to transform each . . . component of the recited control means, as described in the preferred embodiment and . . . shown in Figure 1 of the '529 Patent, into an additional claim limitation." Pl.'s Resp. 16. LBC also disputes ULT's characterization of the sufficiency of Dr. Roberts's analysis in comparing the "control means" limitation and its corresponding structure to the equivalent structures in the accused products; "Dr. Roberts has established that the accused products literally infringe the 'control means' limitation through . . . an equivalent structure[, and] [a]t a minimum, he has created a fact issue[.]" *Id.* at 19. Lastly, LBC asserts that ULT misquoted and mischaracterized Bobel's statements distinguishing his invention from the prior art to distort their true meaning, which does not support ULT's position. LBC urges the Court to deny ULT's motion with regard to the "control means" limitation because a reasonable jury could determine, based on the evidence, that ULT's products literally infringe this limitation.

In its Amended *Markman* order, the Court construed "control means capable of receiving control signals from the DC input terminals and from the resonant converter, and operable to

effectively initiate the oscillations, and to effectively stop the oscillations of the converter” in accordance with section 112, ¶ 6, as reciting three functions with the corresponding structure being control circuit 58, described in the specification of the ‘529 Patent at column 3, line 59 through column 4, line 21. *See Am. Mem. Op.* Order 24-26, ECF No. 107. At the *Markman* stage the parties disputed only whether the specification of the ‘529 Patent disclosed a structure corresponding to the function of “capable of receiving control signals from the DC input terminals.” The Court found that the control circuit 58 corresponded to this function, as with the other two functions of the “control means” limitation. *See id.* In his expert report, Dr. Roberts, LBC’s infringement expert, further subdivides the functions of the “control means” limitations as follows: “(1) control means (a) capable of receiving a control signal from the DC input terminals and (b) operable to effectively initiate the oscillations, and (2) control means (a) capable of receiving a control signal from the resonant converter, and (b) operable to effectively stop the oscillations.” Infringement Report of Dr. Victor Roberts 29, Pl.’s App. Supp. Resp. Def.’s Mot. Summ. J. 38, ECF No. 136. For purposes of summary judgment, the Court will adopt Dr. Robert’s formulation of the functions recited in the “control means” limitation, both for ease of reference and because they are not inconsistent with the Court’s construction of this limitation in the Amended *Markman* order.

The control circuit 58 is described in the ‘529 Patent as consisting of three control terminals and three series current paths between terminals CTa and CTb. The specification describes the control circuit 58 in full as follows:

A control circuit 58 has three control terminals CTa, CTb and CTc. The terminal CTa is connected to the intermediate terminal 27; the terminal CTb is connected to the terminal B-; and the terminal CTc is connected to the base electrode of the transistor 52.

The control circuit 58 has a first series current path between terminals CTa, CTb, and the path has a diode 39, a resistor 40, and

a capacitor 42 connected in series, via a node 41 formed between the resistor 40 and the capacitor 42. A diac 44 is connected between the node 41 and the terminal CTc. A small signal npn transistor 43 is connected with its collector electrode to the node 41, and with its emitter electrode to the terminal CTb.

The control circuit 58 has a second series current path between terminals CTa, CTb, and the path has a diode 34, a resistor 35, and a capacitor 38 connected in series via a node 36 formed between the resistor 35 and the capacitor 38. The transistor 43 has its base electrode connected to the node 36. A resistor 37 is connected between the node 36 and the terminal CTb.

The control circuit 58 has a third series current path between terminals CTa, CTb, and the path has a diode 29, a resistor 30, and a capacitor 33 connected in series via a node 31 formed between the resistor 30 and the capacitor 33. A resistor 32 is connected to the node 31 and to the terminal CTb.

A small signal npn transistor 48 has its collector electrode connected to the terminal CTc and its emitter electrode connected to the terminal CTb. A diac 45 is connected between the node 31 and a based electrode of the transistor 48.

‘529 Patent, Col. 3, l. 59 - Col. 4, l. 21. Thus, the control circuit, as disclosed by the specification, performs the four functions using the various components arranged in three series current paths as described above.

All four functions of the “control means” deal with starting and stopping the oscillations of the resonant converter. The control signal from the DC input terminals communicates to the control circuit when to initiate oscillations. The signal from the resonant converter communicates to the control circuit when to stop oscillations. When the power is cycled on, or a new fluorescent lamp is placed in the terminals, the DC control signal will start to flow in the direct current path DCP until it reaches the control circuit. Once in the control circuit, it will flow through the various components listed above in the first series current path. The current flow through the first series current path will trigger transistor 52 and allow alternating current to flow in the resonant circuit. After the lamp strikes, the DC current entering the control circuit will flow through the various components listed above in the second series current path. The current

flow through the second series current path will trigger transistor 43 thereby discharging capacitor 42, in the first series current path, and preventing the transistor 52 from being triggered a second time, which would cause the circuit to fail.

When a fluorescent lamp is removed from its holders, a current will flow through the various components listed above in the third series current path. The current flow through the third series current path will trigger transistor 48 momentarily. The transistor 48 will turn off the device and the oscillations will cease. Oscillations will not begin again until direct current flows into the control circuit and through the first series current path.

The parties agree that the accused products do not utilize the same structure or structures as the control circuit to perform the functions of receiving control signals and initiating and stopping the oscillations of the resonant circuit. However, LBC contends that the accused products utilize an equivalent structure within the meaning of section 112, ¶ 6. In all accused products, the alleged equivalent structure includes, as a component, either an integrated circuit or microprocessor to control, among other things, the oscillations of the resonant circuit. See Pl.'s Resp. 21. While the components of the equivalent structure may differ depending on the accused product at issue, in their briefing, the parties clearly focus on the integrated circuits or microprocessors relative to the control circuit 58 of the '529 Patent.¹ Thus, the point of dispute between the parties, for purposes of summary judgment, is whether any structure could be equivalent to the "control means" when it uses an integrated circuit or microprocessor to control the oscillations of the resonant circuit.

¹ As noted *supra*, LBC accuses more than thirty allegedly infringing product schematics, many of which apply to more than one product or generation of products. To simplify discussion, ULT divided the accused products into fourteen groups which take into account both differences in Dr. Roberts's infringement analysis and material differences in the products' structure and operation. See Def.'s Br. Supp. 7.

ULT criticizes Dr. Roberts's equivalent structure analysis on this point. In its criticisms, ULT focuses primarily on one statement in the main body of his expert report where Dr. Roberts explains, at a high level, the substance of his section 112, ¶ 6 equivalent structure analysis. *See* Report 30-31, Pl.'s App. 39-40. ULT largely ignores the attachments to Dr. Roberts's report. However, it is in these attachments, which include infringement charts, product schematics, data sheets for the integrated circuits, and source code for microprocessors, where the bulk of the details of Dr. Roberts's analysis is contained. In these attachments, Dr. Roberts details the specific components of the control circuitry in each of the accused products. He also explains how each of the components performs the functions of the "control means" limitation. The Court is satisfied that Dr. Roberts's report, and the attachments thereto, suffice to raise a fact issue with regard to whether the accused products include an equivalent structure to the "control means" limitation.

ULT also argues that Dr. Roberts's equivalent structure analysis fails to take into account certain statements, made by Bobel during prosecution, disclaiming similar control structures in prior art. Bobel's full statement reads as follows:

Zuchtriegel, unlike the present invention, as positively defined by Claim 1, does not disclose a specific control means that is operable to effectively initiate and stop the oscillations of the resonant converter. Further, direct current blocking means coupled to the output terminals and operable to stop flow of the control signal from the DC input terminals whenever at least one gas discharge lamp is removed from the output terminals or is defective, is not taught. This particular arrangement of control means and direct current blocking means is neither taught nor suggested by Zuchtriegel.

Pl.'s App. 626-27. ULT's quotations of this statement omit the second sentence above. The Court agrees with LBC that this statement, when read in context, distinguishes the prior art by asserting that the '529 Patent includes a particular arrangement of the control means and direct

current blocking means. This statement does not constitute a clear and unmistakable surrender of any subject matter or particular structure related to the “control means.” *See Cordis Corp. v. Medtronic Ave, Inc.*, 511 F.3d 1157, 1177 (Fed. Cir. 2008).

Lastly, ULT argues that the alleged “control means” of the accused products are substantially different from the control circuit of the ‘529 Patent such that no reasonable jury could conclude that the accused products use an equivalent structure. In arguing this point, ULT submits evidence regarding the operation of the integrated circuits and microprocessors and how they are different from the components and operation of control circuit 58 in the ‘529 Patent. However, ULT’s evidence is insufficient to conclude, as a matter of law, that no reasonable jury could find that a “control means” using an integrated circuit or microprocessor is equivalent structure to the “control means” disclosed in the ‘529 Patent. Additional considerations also counsel against holding that there is no genuine dispute of material fact as to whether the accused products utilize and equivalent structure to the “control means” of the ‘529 Patent.

First, the Court believes that there is sufficient evidence in the record to conclude that a person of ordinary skill in the art might consider an integrated circuit or microprocessor to be interchangeable with the control circuit 58. The evidence indicates that both types of structures perform the functions of receiving control signals and controlling the oscillations of the resonant circuit. There is a genuine dispute of material fact as to whether an integrated circuit or microprocessor performs these functions in a substantially different way with substantially different results. Secondly, as Dr. Roberts has discussed in his report, the focus or true innovation of the ‘529 Patent is the unique manner in which it senses removal of, or certain defects in, a lamp and shuts down the ballast in response, keeping it from starting again until a new lamp is placed in the output terminals. The focus of the invention is not on the particular

means by which it starts and stops the oscillations of the resonant circuit. Indeed the specification indicates that it may be equipped with all types of oscillatory circuits, including driven circuits, one type of which is an integrated circuit or microprocessor. *See ‘529 Patent, Col. 11, ll. 34-39.* Accordingly, reading the “control means” limitation in the context of the ‘529 Patent, it is appropriate to consider a broader range of equivalent structures to the control circuit 58. *See IMS Tech., 206 F.3d at 1437.* Thus, resolving all doubts and inferences from the evidence in favor of the non-moving party, LBC, the Court finds that there is a genuine dispute of material fact as to whether the accused products include an equivalent structure to the “control means” of the ‘529 Patent. Therefore, summary judgment in favor of ULT that the accused products do not contain an equivalent structure to the “control means” limitation is inappropriate.

Next, ULT seeks summary judgment because the accused products do not include the “direct current blocking means” limitation. According to ULT, “[u]sing the ordinary meaning of defective, ULT’s products do not infringe.” Def.’s Br. Supp. 29. ULT bases its argument on a new construction of the latter half of the “direct current blocking means” limitation, which reads “whenever at least one gas discharge lamp is removed from the output terminals or is defective[.]” ULT proffers a definition of “defective” that takes into account all types of fluorescent lamp defects. In sum, ULT argues that “the reference to a ‘defective’ lamp in claim 1, when construed in accord with its ordinary meaning, encompasses any lamps with a broken or defective filament as well as other types of defects where no filaments are broken or defective, such as degassed lamps.” *Id.* at 33. On the basis of this definition, ULT contends that none of the accused products infringe. “First, if the lamps are defective in any way that does not involve a broken or removed filament . . . the DC control signal path will not be stopped by the ‘direct current blocking means.’” *Id.* “Second, in several of the products, one or more of the filaments

can be ‘open,’ that is, broken or removed, and yet the DC control signal path traced by Dr. Roberts will not be broken because it does not pass through that filament or filaments.” *Id.* at 34. For these reasons, ULT argues summary judgment is appropriate because the accused products do not include a “direct current blocking means” performing the function of “operable to stop the flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective[.]”

LBC argues that ULT’s proffered construction of the “direct current blocking means” “focuses on the term ‘defective’ and tries to apply its plain ordinary meaning, devoid of any context.” Pl.’s Resp. 33 n.12. Rather, according to LBC, “a careful reading of [the specification of the ‘529 Patent], confirm[s] that the DC blocking means limitation is focused on the DC control path, such that the DC blocking means must be operable to stop the flow of the DC control signal whenever that path is broken.” Pl.’s Resp. 35. LBC proposes to construe the “whenever” clause of the “direct current blocking means” limitation as: the DC blocking means is operable to stop the flow of the DC control signal “whenever the DC control path through the filaments is broken due to lamp removal or a broken filament.” Pl.’s Resp. 25. LBC argues that its proffered construction is the only one that takes into account the meaning of the “direct current blocking means” in the context of the specification of the ‘529 Patent. Based on its construction, LBC asserts that there are genuine disputes of material fact whether the accused products infringe literally or, in some cases, under the Doctrine of Equivalents.

Since ULT’s non-infringement position is based on a newly proffered construction of the “direct current blocking means” limitation, the Court will begin by construing that term. The limitation reads in full: “direct current blocking means coupled to the output terminals and operable to stop flow of the control signal from the DC input terminals, whenever at least one

gas discharge lamp is removed from the output terminals or is defective.” The Court previously construed this term in accordance with section 112, ¶ 6 as a means-plus-function limitation. *See* Am. Mem. Op. & Order 26-32. The Court found the recited function to be “operable to stop the flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective[.]” *See id.* at 29-30, 33. As corresponding structure, the Court identified “a capacitor or diode within the control circuit[.]” *See id.* at 30-31, 33. The parties do not contest these settled constructions; rather, ULT seeks to further construe the meaning of the “whenever” clause of the “direct current blocking means” limitation.

ULT’s proposed construction focuses on the term “defective.” The gist of ULT’s construction of “defective,” as used in the “whenever” clause, is that the “direct current blocking means” should block the DC control signal when any fluorescent lamp connected to the ballast is defective in any way, whether it be a degassed lamp, broken filament, or otherwise.

LBC urges the Court to reject ULT’s construction because it seeks to construe the “whenever” clause without reference to the meaning of the clause in the context of the ‘529 Patent. LBC’s construction, as noted above, focuses on the DC control path: the DC blocking means is operable to stop the flow of the DC control signal whenever the DC control path through the filaments is broken due to lamp removal or a broken filament.

The Court agrees with LBC and adopts its proposed construction. A careful review of the specification of the ‘529 Patent reveals that it speaks in terms of blocking the DC control signal whenever the DC control path is broken. *See* ‘529 Patent, Col. 8, l. 13-18 (“When the voltage across the capacitor reaches a level sufficient enough to turn ON the transistor 43, the capacitor 42 will be held discharged for any time period as long as: (i) there is an unbroken direct current path DCP between terminal B+ and terminal CTa . . .”); Col. 8, l. 24-42 (“While the device is

operation in Mode A, if the fluorescent lamp 16 is removed out of its holders . . . [t]he direct current path DCP between terminal B+ and terminal CTa is broken due to missing filaments 12, 15 of lamp 16. The DC current will not flow through DC blocking circuits 57, 50"); Col. 8, l. 47-50 ("The fluorescent lamp 16 is now re-inserted into its holders, that will complete the direct current path . . . between terminal B+ and terminal CTa, and the device will start as in Mode A above."); *see also* Col. 7, l. 51-53. The Court also agrees with LBC that "a careful reading of Column 8, line 51 through Column 9, line 3, along with Figures 1-3, confirm that the DC blocking means limitation is focused on the DC control path[.]" Pl.'s Resp. 35.

ULT fails to direct the Court to any language in the specification of the '529 Patent supporting its broad construction of the "whenever" clause.² *See Nazomi Commc'ns, Inc. v. Arm Holdings, PLC*, 403 F.3d 1364, 1368 (Fed. Cir. 2005) (Courts should look first to the intrinsic record of a patent, including the claims and specification, to determine the meaning of words in the claims.). Rather, ULT relies primarily on extrinsic evidence, including a dictionary and expert testimony, to define the term "defective" independent of the claims and specification of the '529 Patent. This is not a proper claim construction. *See Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1332 (Fed. Cir. 2001) ("If the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed."). Since the specification makes clear that the patent defines "defective" in terms of a broken DC control signal path, it is not necessary to resort to extrinsic sources to define it.

While the Court understands that ULT's construction of the "whenever" clause is entirely logical from a plain language standpoint, it does not take into account the teachings of the '529

² ULT points to two statements from the specification, however, both of these statements refer to faults sensed by the "control means" or the control signal from the resonant converter. *See* Col. 11, ll. 9-14; Col. 3, ll. 19-22. These statements are not relevant to defining defects sensed by the "direct current blocking means."

Patent. To accept ULT's construction the Court must define the term "defective" without reference to the specification's discussion of the direct current flow through the ballast. Accordingly, the proper construction of the "direct current blocking means" is as follows: the direct current blocking means is operable to stop flow of the control signal from the DC input terminals, whenever the direct current path between terminal B+ and terminal CTa is broken. This construction does not disregard the actual language of claim, "whenever at least one gas discharge lamp is removed from the output terminals or is defective[.]" but defines "removed from the output terminals or is defective" based on the specification's focus on the direct current control path. Thus, a defect may be defined as any condition that would break the direct current path, meaning either lamp removal or a broken filament in the current path. The Court will consider ULT's non-infringement argument based on this construction of the "whenever" clause of the "direct current blocking means" limitation.

ULT argues that the accused products do not infringe the "direct current blocking means" limitation because none of them are operable to stop the flow of the control signal whenever at least one gas discharge lamp is removed or defective. However, this argument is predicated on ULT's proffered construction of defective, which was rejected above. This construction takes into account the fact that, in many of the accused products, the DC control signal will not be interrupted as a result of various faults; therefore, if the "direct current blocking means" is construed to require stopping the flow of the control signal in the event of any type of defect, the accused products, which do not do so, would not infringe. ULT offers no argument or evidence to support a contention that under the above-adopted construction of the "whenever" clause, the accused products do not infringe the "direct current blocking means" as a matter of law.

Accordingly, summary judgment that none of the accused products literally infringe the “direct current blocking means” is inappropriate.

LBC also relies on the Doctrine of Equivalents (“DOE”) to prove infringement of the “direct current blocking means” for accused products in Groups 5, 8, and 9. In these products the “direct current blocking means” does not stop the control signal but redirects it through a shunt resistor which has the effect of substantially reducing the magnitude of the DC control current such that the “control means” can detect lamp removal or reinsertion. *See* Pl.’s Resp. 26-27 (quoting Report of Dr. Roberts). In his report, Dr. Roberts explains why he believes that these products infringe under the DOE and the basis for his opinion, including the structures used in the accused products, through infringement charts, and why he believes a person of ordinary skill in the art would believe the differences to be insubstantial. *See* Report of Dr. Roberts 34-35. The Court is satisfied that this evidence is sufficient to raise a fact issue as to whether the accused products in Groups 5, 8, and 9 infringe under the DOE. However, ULT also challenges the procedural propriety of LBC’s DOE infringement contentions.

ULT argues that the Court should strike LBC’s DOE infringement contentions and grant summary judgment with regard to all accused products in Groups 5, 8, and 9, since LBC failed to disclose its reliance on the DOE. The Court agrees and will strike LBC’s DOE infringement contentions related to the “direct current blocking means.” Several considerations underlie the Court’s decision on this issue. First of all, LBC utterly failed to comply with Northern District of Texas Miscellaneous Order No. 62, ¶¶ 3-1, 3-6. These paragraphs require a party to disclose “specifically and in detail where each element of each asserted claim is found within each accused instrumentality” and “[w]hether each element of each asserted claim is claimed to be literally present or present under the doctrine of equivalents in the accused instrumentality.”

Misc. Order No. 62 ¶ 3-1. They also permit a party to amend or supplement these disclosures after receiving further discovery, or after the court issues its final claim construction ruling.

Misc. Order No. 62 ¶¶ 3-1, 3-6.

LBC has never amended or supplemented its September 11, 2009 infringement contentions, which contained only a boilerplate reservation of rights to assert infringement under the DOE. Such boilerplate language was insufficient to place ULT on notice of LBC's specific DOE infringement theory. *See Rambus, Inc. v. Hynix Semiconductor, Inc.*, 2008 WL 5411564 *3 (N.D. Cal. Dec. 29, 2008). LBC's final infringement contentions were due January 3, 2011; however, LBC never moved for an extension of this deadline or otherwise indicated that it planned to add infringement contentions under the DOE. ULT did not learn of LBC's DOE theory until LBC served Dr. Roberts's expert report on January 24, 2011. This non-disclosure effectively deprived ULT of the opportunity to assert additional invalidity contentions based on LBC's DOE contentions.³ Setting aside any time constraints relative to the approaching summary judgment deadlines and trial, in order to properly amend its invalidity contentions, ULT would have been required to seek leave of court since that deadline had passed as well.

LBC argues that in serving Dr. Roberts's expert report it was in fact serving its final infringement contentions based on an agreement between the parties. However, ULT denies that there was any agreement between the parties allowing LBC to serve its final infringement contentions approximately three weeks late and in the form of an expert report. LBC does not

³ LBC asserts that ULT was not prejudiced because ULT's infringement expert included his rebuttal opinions relative to LBC's DOE theory. However, this does not excuse LBC's non-disclosure of its DOE infringement contentions. It was entirely proper and prudent for ULT to attempt to address those arguments in event that LBC could demonstrate that the delay was not within its control or diligence in complying with the local patent rules. If ULT chose not to address LBC's DOE contentions it would run the risk of finding itself in the same position as LBC on this issue. In sum, ULT did not waive its right to complain of LBC's non-disclosure by addressing their DOE contentions on the merits.

offer any evidence of such an agreement. Otherwise, LBC offers no explanation for why it failed to comply with the Northern District's patent rules relating to disclosure of infringement contentions. To the extent that an agreement between the parties did permit LBC to serve detailed claim charts, as a part of its infringement contentions, for three representative products only, LBC properly bore the risk that the representative products it chose might not in fact be representative of its final infringement contentions in that none of the three products infringed under the DOE.

In sum, the Court cannot simply overlook the fact that LBC completely failed to fully disclose its infringement contentions until it served the report of its infringement expert. LBC effectively seeks leave from the Court to amend its infringement contentions via its response to ULT's motion for summary judgment. The Court will not permit such a late amendment of infringement contentions, especially when they are in direct violation of the local rules, and the offending party has not demonstrated any effort to comply those rules. LBC has given no reason for waiting until it served its infringement expert's report to fully disclose its infringement allegations.⁴ Likewise, LBC has not shown that the delay was outside of its control. Therefore, the Court will strike LBC's untimely DOE contentions.

LBC's infringement allegations relating to all products in Groups 5, 8, and 9 are based on a DOE theory. *See* Pl.'s Resp. 26-27. Since the Court has stricken LBC's DOE infringement contentions related to these products, and LBC does not contend or present evidence that these products infringe literally, summary judgment in favor of ULT that products in Groups 5, 8, and 9 do not infringe is appropriate and will be granted.

⁴ LBC complains separately of discovery malfeasance on the part of ULT and its delays in turning over certain documents. The Court declines to wade into this matter as it is not properly before the Court.

In sum, the Court has construed the “whenever” clause, and more specifically the term “defective,” within the “direct current blocking means” limitation. Based on this construction, the Court has determined that there are genuine disputes of material fact as to whether the accused products infringe literally. The Court has also found that a genuine dispute of material fact exists as to whether the accused products contain an equivalent structure, within the meaning of section 112, ¶ 6, to the “control means” limitation. Accordingly, ULT’s motion for summary judgment based on non-infringement of the ‘529 Patent should be denied.

B. Invalidity for Anticipation

ULT also moves for summary judgment on its first and third affirmative defenses of invalidity of the patent-in-suit for anticipation under 35 U.S.C. § 102. ULT bases its anticipation defenses on two Japanese patents, JP 61-153997 (“JP ‘997”) and JP 1-157099 (“JP ‘099”). According to ULT, each of these patents qualify as prior art references under § 102(b) and teach each limitation of the asserted claims of the ‘529 Patent. LBC does not dispute that JP ‘997 and JP ‘099 constitute “printed publication[s] in . . . a foreign country” under § 102(b). Therefore, the Court will proceed under the assumption that both references qualify as prior art references.

In order to invalidate the asserted claims of the ‘529 Patent, ULT must prove that one or both of these prior art references anticipate each limitation of the asserted claims and that there are no genuine disputes of material fact on the issue. “Anticipation requires a showing that each element of the claim at issue, properly construed, is found in a single prior art reference.” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1323 (Fed. Cir. 2011). Therefore, ULT must prove, as a matter of law, that each element of the asserted claims, as construed by the Court, are found in one of the prior art references, JP ‘997 or JP ‘099.

Before addressing the merits of ULT's anticipation defenses, the Court must resolve LBC's objection to ULT's primary evidence of anticipation, the expert report of Dr. Michael Giesselmann, ULT's expert on invalidity. *See* Pl.'s Obj. Evid. Supp. Def.'s Mot. Summ. J. 2, ECF No. 134. LBC objects to the report and the attachments thereto and moves to strike it because it is unsworn and is therefore hearsay not subject to any exception. *See id.* In response, ULT attached the Declaration of Dr. Giesselmann, in which he verifies that his originally unsworn report, and the attachments thereto, set forth the substance and basis of his opinions regarding invalidity of the '529 Patent. *See* Def.'s Resp. Pl.'s Obj. 1-2, Ex. A, ECF No. 139. If an expert report is objected to as unsworn, the deficiency may be corrected by filing a sworn declaration endorsing the unsworn report. *See Straus v. DVC Worldwide, Inc.*, 484 F. Supp. 2d 620, 633-34 (S.D. Tex. 2007). Accordingly, with the sworn declaration, Dr. Giesselmann's report and its attachments and exhibits are admissible summary judgment evidence. Thus, LBC's objections thereto are overruled.⁵

ULT argues, and presents evidence in support, that JP '997 and JP '099 each contain every element of the asserted claims of the '529 Patent. *See* Expert Report of Dr. Michael Giesselmann, Ex. C6, App. Supp. ULT's Mot. Summ. J., ECF No. 127. LBC presents evidence from its invalidity expert, Dr. Regan Zane, in his rebuttal report, contesting only whether the prior art references contain the "direct current blocking means" limitation of Claim 1 and the

⁵ LBC also objects to and moves to strike Exhibits 11 and 12 to ULT's Appendix In Support of Motion for Summary Judgment, ECF No. 127. LBC objects that the underlying documents, presumably the Japanese Patents themselves, are not competent summary judgment evidence under Rules 802 and 901 of the Federal Rules of Evidence. These objections are overruled. The Japanese patents are self-authenticating documents under Rule 902 and would qualify under Rule 802(8) as business records. Moreover, a patent submitted as prior art is not hearsay, rather it is offered for the purpose of demonstrating its existence and the invention described therein; it is not offered to prove the truth of matters asserted in the document. *See Joy Techs., Inc. v. Manbeck*, 751 F. Supp. 225, 233 n.2 (D.D.C. 1990).

limitations of dependent Claims 2 and 5 respectively.⁶ See Expert Report of Dr. Regan Zane, Ex. 2, Pl.’s App. Therefore, the Court will assume, for purposes of summary judgment, that both JP ‘997 and JP ‘099 contain each element of the asserted claims of ‘529 Patent, with the exception of the “direct current blocking means” and the respective limitations of dependent Claims 2 and 5. Thus, the only relevant questions are whether JP ‘997 or JP ‘099 teaches the “direct current blocking means” limitation of independent Claim 1 and the respective limitations of dependent Claims 2 and 5, as they have been construed by the Court or agreed to by the parties.

The dispute between the parties with respect to the “direct current blocking means” of Claim 1 centers on whether the “direct current blocking means,” or capacitor(s), in JP ‘997 and JP ‘099 are “coupled to the output terminals” within the meaning of the ‘529 Patent. To address this issue, it is necessary to further construe “direct current blocking means coupled to the output terminals.” Dr. Roberts defines “output terminals” as follows:

In the Figures of the ‘529 Patent, output terminals are shown as nodes (sometimes referred to as terminals or points). On the other hand, a node (or terminal) that simply indicates a connection between two lamps but does not otherwise connect to the device is not an output terminal. In the typical one-lamp configuration, each filament of the lamp is associated with two output terminals (i.e., one set of two output terminals per filament). In most two-lamp configurations, where the lamps are connected in series, the ballast will feature six output terminals (see, e.g., Fig. 3 of the ‘529 Patent, which shows a set of output terminals on each end [10, 11, and 22, 23], and a set of out terminals in the middle [307 and 308]).

⁶ ULT argues that LBC has conceded that the prior art references teach all limitations of independent Claim 1, except the “direct current blocking means” because Dr. Zane did not discuss any other limitations in his expert report. LBC disputes this contention insofar as ULT argues that they have “conceded” those elements. However, what is clear is that at the summary judgment stage, LBC has come forward with evidence relating only to the “direct current blocking means” and dependent Claims 2 and 5, in response to ULT’s contentions and evidence, in Dr. Giesselmann’s charts attached to his report, that the prior art references teach every limitation of the asserted claims of the ‘529 Patent.

Report of Dr. Roberts 28-29. Dr. Zane also agrees with this definition of “output terminals.” See Report of Dr. Zane 14. ULT does not express any disagreement. Dr. Roberts also defines “coupled to the output terminals” as follows:

[T]he requirement that the DC blocking means be “coupled to” (i.e. connected to) the output terminals is a requirement that encompasses various types of connections. In the ‘529 Patent, Mr. Bobel speaks of DC blocking circuits that are “connected across” the output terminals (see, e.g., Col. 3, ln. 53-55 and the outer sets of output terminals in Figs. 1 and 3) and DC blocking circuits that are “connected between” the output terminals (see, e.g., Col. 4, ln. 41-44 and the middle set of output terminals in Fig. 3).

Report of Dr. Roberts 32. Again, Dr. Zane agrees with this statement and adopts it in his report. See Report of Dr. Zane 14. Likewise, ULT does not express any disagreement. Moreover, both Dr. Roberts and Dr. Zane opine that the ‘529 Patent requires that each set of output terminals be connected to a DC blocking capacitor. See Report of Dr. Roberts 32; Report of Dr. Zane 14. Accordingly, for purposes of summary judgment, the Court will adopt these constructions of the “direct current blocking means.”

These additional constructions, in addition to the Court’s construction of the “whenever” clause above, lead to two additional observations. First, the ‘529 Patent does not require that the DC control signal pass through every filament of every lamp. Figure 2 of the ‘529 Patent, for example, discloses two lamps connected in series; the DC control signal does not pass through parallel-connected filaments 213 and 214. Dr. Giesselmann also notes this embodiment in his report. See Report of Dr. Giesselmann 16. This observation is consistent with Dr. Roberts’s definition of “output terminals” as not including those terminals where two lamps connect together but do not otherwise connect to the ballast. In Figure 2, terminals x and y are not “output terminals.” Secondly, the ‘529 requires that the DC control signal pass through at least

one filament of each lamp.⁷ With the meaning of the “direct current blocking means” established, the Court may consider ULT’s anticipation arguments.

First, ULT argues that JP ‘997 anticipates Claim 1 because it includes the “direct current blocking means.” Dr. Giesselmann identifies the DC blocking capacitors in JP ‘997 as follows: “When one of the lamps is removed or defective, capacitors C2a and C2b, shown in Figure 1 [of the JP ‘997 Patent], block the flow of DC current through the primary windings of T2 and the choke coils CH1 and CH2.” Report of Dr. Giesselmann 24. ULT asserts that capacitors C2a and C2b and their arrangement in relation to the filaments of respective lamps F1 and F2 satisfy the “direct current blocking means” of Claim 1.

In JP ‘997, the left lead of C2a is coupled to the left filament of F1, the right lead of C2a is coupled to the right filament of F1 through one winding of T2, the left lead of C2b is coupled to the left filament of F2, and the right lead of C2b is coupled to the right filament of F2 via another winding of T2. . . . Dr. Zane . . . admitted during his deposition that JP ‘997 teaches that capacitors C2a and C2b are coupled to each set of output terminals. . . . Dr. Zane said in his report that “Claim 1 requires DC blocking means that accounts for each *set* of output terminals.” . . . Therefore, there is no credible interpretation of claim 1 whereby the claim is not anticipated by JP ‘997.

Pl.’s Reply Br. Supp. Mot. Summ. J. 22, ECF No. 138. Therefore, according to ULT, Claim 1 of the ‘529 Patent is anticipated by JP ‘997.

LBC disputes ULT’s assertion by arguing that JP ‘997 does not include DC blocking circuits accounting for each set of output terminals as required by the ‘529 Patent. According to Dr. Zane:

⁷ If the DC control signal did not pass through at least one filament of each lamp then the ballast would attempt to restrike when a lamp, through which the DC control signal does not pass, is removed from the ballast. The “direct current blocking means” does not allow for this because it requires that the DC control signal be stopped “whenever at least one gas discharge lamp is removed[.]”

JP ‘997 does not teach “direct current blocking means coupled to the output terminals.” To the extent Giesselmann relies on C2a or C2b as “DC blocking means,” they are not coupled to each set of output terminals, as required by Claim 1 of the ‘529 patent. . . . Giesselmann does not specifically identify the output terminals in JP ‘997 or otherwise cite a portion of the text to support his position; rather, he skips over a discussion of the output terminals and does not attempt to explain how or by what configuration the DC blocking means is allegedly coupled to each set of output terminals.

Report of Dr. Zane 22-23. For this reason, LBC argues, JP ‘997 does include “direct current blocking means.”

Based on the arguments and evidence summarized above, it is clear that the parties closely contest this issue. The evidence indicates that JP ‘997 includes a capacitor connected in parallel to each lamp. The parties do not dispute that these capacitors, C2a and C2b, are capable of stopping the flow of the controls signal from the DC input terminals whenever the DC control signal path is broken because the lamp is removed from the output terminals or a filament is broken. Dr. Zane, in his deposition, has gone so far as to concede that each capacitor is connected between the output terminals, but noted that the capacitors are parallel to the respective lamps, unlike the embodiments disclosed in the ‘529 Patent. The Court also notes that the capacitors C2a and C2b are each connected between two sets of output terminals, or between the respective filaments of lamps F1 and F2, in JP ‘997, rather than each DC blocking capacitor being connected across or between one set of output terminals as disclosed in the ‘529 Patent.

As the party raising invalidity for anticipation as a defense, ULT carries the burden to prove, by clear and convincing evidence, that JP ‘997 includes every limitation of the asserted claims. Resolving all doubts and inferences in favor of the non-moving party, and considering that anticipation is ultimately a question of fact, the Court finds that LBC has set forth sufficient evidence to raise a genuine dispute of material fact as to whether JP ‘997 includes the “direct

current blocking means.” Therefore, summary judgment in favor of ULT on this issue will be denied.⁸

Secondly, ULT argues that JP ‘099 anticipates Claim 1 of the ‘529 Patent because it includes the “direct current blocking means.” According to ULT:

The *only* difference LBC identified between claim 1 of the ‘529 patent and JP ‘099 is that the DC blocking means of JP ‘099 “is coupled only to the output terminals associated with filaments f12 and f21; it is not coupled to the output terminals associated with [filaments] f11 and [f22].” [citation omitted] In other words, the Zane Report interprets claim 1 to require that a separate DC blocking means be provided for each filament. Since it is the function of the DC blocking means to stop the flow of the control signal from the DC input terminals whenever at least one gas discharge lamp is removed from the output terminals or is defective, LBC’s position, as expressed in the Zane Report, is that the control signal must pass through all of the filaments of the lamps (so long as the lamp is not defective).

Def.’s Br. Supp. 46. As indicated, ULT bases its arguments related to the JP ‘099 Patent on a construction of the “direct current blocking means” where a separate DC blocking means must be provided for each filament. ULT argues, that since LBC asserts that a lamp is defective only when the DC control path is broken, then since filaments f11 and f22 are not in the DC control path, JP ‘099 includes the “direct current blocking means” limitation.

Summary judgment in favor of ULT that JP ‘099 anticipates Claim 1 of the ‘529 Patent is inappropriate because the DC blocking capacitor, C12, is not coupled to the outside sets of output terminals, associated with filaments f11 and f22. ULT’s anticipation argument is contrary to the Court’s constructions of the “direct current blocking means” set forth above. Specifically, the “direct current blocking means” does not require that a DC blocking capacitor be coupled to every filament, rather it requires that a capacitor be coupled to each set of output terminals. As

⁸ ULT also contends that JP’997 anticipates dependent Claims 2 and 5; however, since the Court has found a question of fact as to whether JP ‘997 includes the “direct current blocking means,” the Court need not address the additional limitations presented by Claims 2 and 5.

Figure 2 of the ‘529 Patent makes clear, it is possible for the “direct current blocking means” to be coupled to every set of output terminals though not connected to every lamp filament. Points at which two lamps connect to one another but do not otherwise connect to the ballast are not output terminals. Thus, if two filaments are connected in series, in the manner illustrated by Figure 2 of the ‘529 Patent, those filaments are not connected to output terminals and the DC control current would not pass through them. Therefore, the “direct current blocking means” requires that a DC blocking circuit be coupled to every set of output terminals but not every lamp filament, depending on the configuration at issue. Summary judgment in favor of ULT that JP ‘099 anticipates Claim 1 of the ‘529 Patent will be denied.⁹

B. “Voltage Source Means” Limitation

ULT renews its argument that the Court should hold the asserted claims of the ‘529 Patent invalid as indefinite as a result of the “voltage source means” limitation of Claim 1. The Court has twice addressed this limitation and declines ULT’s invitation to address the same issue a third time. ULT presents no additional basis for holding the asserted claims invalid. The Court has previously addressed this issue and hereby adopts and incorporates its prior findings and analysis. *See* Am. Mem. Op. & Order 16-24, December 2, 2010, ECF No. 107. Accordingly, ULT’s motion for summary judgment that the asserted claims are invalid as indefinite will be denied.

IV. CONCLUSION

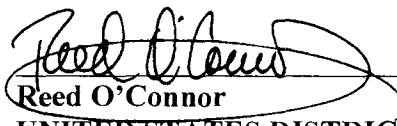
The parties have also filed various objections to certain evidence presented by the opposing party. LBC’s objections (ECF No. 134) to the testimony of Dr. Victor Roberts and Dr. Regan Zane are overruled as moot. ULT objects (ECF No. 137) to various new opinions

⁹ ULT also contends that JP ‘099 anticipates dependent Claims 2 and 5; however, since the Court has found that JP ‘099 does not include the “direct current blocking means,” the Court need not address the additional limitations presented by Claims 2 and 5.

submitted by Dr. Roberts. The Court will sustain this objection to the extent these opinions were not a part of Dr. Roberts's original expert report and that ULT has not had the opportunity to depose Dr. Roberts on these opinions. ULT's remaining objections are overruled as moot. Lastly, the Court will deny LBC's motion for leave to file a sur-reply (ECF No. 141). LBC did not identify any new arguments raised for the first time in ULT's reply brief. Moreover, the evidence attached to ULT's reply brief did not warrant a sur-reply. In any event, LBC's sur-reply went beyond addressing the attachments to ULT's reply brief. Accordingly, LBC's motion for leave to file a sur-reply (ECF No. 141) is **DENIED**.

Consistent with the Court's findings and analysis above, ULT's motion for summary judgment will be granted with respect to any infringement claims related to Claims 3, 4, and 18 of the '529 Patent. ULT's motion will also be granted with respect to infringement of all accused products in Groups 5, 7, 8, and 9. Therefore, ULT's Motion for Summary Judgment or Partial Summary Judgment (ECF No. 127) is hereby **GRANTED, IN PART**, and the remainder is hereby **DENIED**.

SO ORDERED on this 4th day of May 2011.



Reed O'Connor
UNITED STATES DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
WICHITA FALLS DIVISION**

LIGHTING BALLAST CONTROL, LLC

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Plaintiff,

v.

CIVIL ACTION NO. 7:09-CV-29-O

**PHILIPS ELECTRONICS NORTH
AMERICA CORP., et al.,**

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Defendants.

AMENDED MEMORANDUM OPINION AND ORDER

Before the Court is Plaintiff Lighting Ballast Control, LLC’s (“LBC”) Motion for Reconsideration (ECF No. 102) of this Court’s Memorandum Opinion and Order of August 19, 2010 (ECF No. 101) construing the “voltage source means” limitation in LBC’s United States Patent 5,436,529 (“529 Patent”) issued on July 25, 1995 and entitled “CONTROL AND PROTECTION CIRCUIT FOR ELECTRONIC BALLAST.” After finding that the “voltage source means” limitation in Claims 1 and 18 of the 529 Patent should be construed in accordance with 35 U.S.C. § 112 ¶ 6 the Court held the claims invalid for indefiniteness under section 112, ¶ 2 because the patent’s specification failed to disclose a structure corresponding to the “voltage source means” limitation. *See generally* Memorandum Opinion and Order, August 19, 2010, ECF No. 101. As explained below, the Court finds Plaintiff’s arguments on reconsideration are well-taken. Accordingly, the Court hereby vacates its Memorandum Opinion and Order of August 19, 2010, in its entirety and issues this Amended Memorandum Opinion and Order on claim construction.

The invention at issue in this patent infringement case is a lighting product, specifically an

I have a true copy of an instrument on file in my office on 10/05/2011,
Austin, U.S. District Court,
Northern District of Texas

electronic ballast. A ballast is a device for starting and regulating fluorescent and other types of lamps. A ballast provides proper voltage to light the lamp, and regulates the electric current flowing through the lamp to control light output. The ballasts at issue in this case are designed to power fluorescent lamps with heatable filaments. The parties dispute various claim terms in the 529 Patent. The Court has construed the disputed claim terms after reviewing the briefs and responses of the parties, the applicable law, and where appropriate, any extrinsic evidence submitted by the parties.

I. BACKGROUND

The Court sets forth only those facts necessary to provide context for the claim construction. Plaintiff LBC holds the exclusive right to enforce the 529 Patent. The inventor is Andrzej “Andrew” Bobel. The 529 Patent covers a lighting ballast that powers fluorescent lamps with heatable filaments. An electronic ballast practicing the 529 Patent operates in three different stages: (1) the initial start-up of the ballast, (2) the shut-down or sleep-mode of the ballast, and (3) the re-starting of the ballast after an inoperable lamp has been replaced. Pl.’s Opening Br. Cl. Const. 4, ECF No. 84. The invention was intended to address significant technical challenges facing the ballast industry in 1993; specifically, how to preserve the integrity of the ballast by not drawing power from a power line source when a lamp is removed or defective, and by not having to turn the power OFF and ON when the lamp is replaced. *Id.* at 6. The invention covered by the 529 Patent was intended to remedy these issues in a safe, energy efficient, and affordable manner. *Id.*

LBC sues Defendant Universal Lighting Technologies, Inc. (“ULT”) claiming infringement of the 529 Patent because ULT manufactures, uses, or sells electronic ballasts utilizing circuitry that monitors the voltage across one or more lamps and provides end-of-life protection for multiple types

of failures.¹ Pl.'s Orig. Compl. 4, ECF No. 1. LBC specifically points to the ULT B254PUNV-D ballast as infringing on one or more claims of the 529 Patent. *Id.* ULT denies any infringement and brings a counterclaim seeking a declaration that ULT has not infringed any of the claims of the 529 Patent, and that the patent is invalid. Def.'s Am. Answer 7, ECF No. 70.

II. LEGAL STANDARDS - PATENT CLAIM CONSTRUCTION

Patent infringement is the unauthorized making, using, selling, offering to sell, or importing into the United States of any patented invention during the term of the patent. 35 U.S.C. § 271(a). In a patent infringement case, a court first determines the proper construction of the patent claims by establishing, as a matter of law, the scope and boundaries of the subject-matter of the patent. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370, 384-85 (1996). Second, the trier of fact compares the properly construed claims to the allegedly infringing device(s) and determines whether there has been an infringement. *Id.* The issue before the Court is the proper construction of certain disputed claims in the 529 Patent.

A. Rules of Claim Construction

The claims of a patent are the numbered paragraphs at the end of the patent that define the scope of the invention, and thus the scope of the patentee's right to exclude others from making, using, or selling the patented invention. *See Astrazeneca AB v. Mutual Pharm. Co.*, 384 F.3d 1333, 1335-36 (Fed. Cir. 2004). Claim construction is the process of giving proper meanings to the claim language thereby defining the scope of the protection. *See Bell Commc 'ns Research, Inc. v. Vitalink Commc 'ns Corp.*, 55 F.3d 615, 619 (Fed. Cir. 1995) (internal citations omitted).

¹ LBC originally sued several defendants, however, ULT is the only remaining defendant in the case, pending final settlement with Philips Electronics North America Corp.

Claim construction starts with the language of the claim itself since a patent's claims define the invention to which the patentee is entitled the right to exclude. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). “The claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Id.* at 1314. Moreover, claim terms should be given their ordinary and customary meaning as understood by a person of ordinary skill in the art as of the effective filing date of the patent application. *Id.* at 1313. This is because a patent is addressed to, and intended to be read by, others skilled in the particular art. *Id.* However, the patentee is free to define his own terms, so long as any special definition given to a term is clearly defined in the specification. *Intelllicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992).

When construing disputed claim terms the court should look first to the intrinsic record of the patent, including the claims and the specification, to determine the meaning of words in the claims. *Nazomi Commc’ns., Inc. v. Arm Holdings, PLC*, 403 F.3d 1346, 1368 (Fed. Cir. 2005). “The specification is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315. The specification acts as a dictionary when it expressly or implicitly defines terms. *Id.* at 1321. Courts should also refer to the prosecution history if it is in evidence. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The prosecution history is part of the intrinsic record and consists of a complete record of all proceedings before the United States Patent and Trademark Office, including prior art cited during the examination of the patent, and express representations made by the applicant as to the scope of the claims. *Id.*

The Federal Circuit has also stated that district courts may “rely on extrinsic evidence, which consists of all evidence external to the patent and prosecution history, including expert and inventor

testimony, dictionaries, and learned treatises.” *Id.* (internal quotations omitted). Dictionaries and treatises can be “useful in claim construction[,]” particularly technical dictionaries which may help the court “to better understand the underlying technology and the way in which one of skill in the art might use the claim terms.” *Id.* at 1318 (internal quotations omitted). As to expert testimony, the Federal Circuit has stated:

[E]xtrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.

Id. However, “a court should discount any expert testimony that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.” *Id.* (internal quotations omitted). Extrinsic evidence is less significant than the intrinsic record and undue reliance on it may pose a risk of changing the meaning of claims, contrary to the public record contained in the written patent. *Id.* 1317, 1319.

B. Means-Plus-Function Limitations

Pursuant to 35 U.S.C. § 112 ¶ 6 a patentee may express a claim limitation by reciting a function to be performed by a generic means, rather than reciting in the claim the actual structure for performing the particular function. Section 112, ¶ 6 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Section 112, ¶ 6 thus “operates to restrict claim limitations drafted in such functional language to those structures, materials, or acts disclosed in the specification (and their equivalents) that perform the claimed function.” *Personalized Media Comm’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 703 (Fed. Cir. 1999). “The point of the requirement that the patentee disclose particular structure in the specification and that the scope of the patent claims be limited to that structure and its equivalents is to avoid pure functional claiming.” *Aristocrat Techs. Australia Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

The determination of whether a particular limitation should be regarded as a means-plus-function limitation is a question of law, even though it is a question on which evidence from experts may be relevant. *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004) (citations omitted). The *Lighting World* court set forth the standard to be used when determining whether to apply section 112, ¶ 6 to a claim limitation:

A claim limitation that actually uses the word “means” invokes a rebuttable presumption that § 112, ¶ 6 applies. By contrast, a claim term that does not use “means” will trigger the rebuttable presumption that § 112, ¶ 6 does not apply. The use of the term “means” is central to the analysis because the term “means,” particularly as used in the phrase “means for,” is part of the classic template for functional claim elements and has come to be closely associated with means-plus-function claiming.

Id. at 1358. However, claim language that further defines a generic term, such as nouns or adjectival qualifications that appear before or after the word “means,” can add or suggest sufficient structure to avoid section 112, ¶ 6. *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006). Moreover, section 112, ¶ 6 may be avoided where “the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the terms identify the structures by their function.” *Id.* at 1356

(quotations and citations omitted).

Claim construction of a means-plus-function limitation has two steps: “First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description of the patent that performs that function.” *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006). The claimed function is recited in the claim itself, and the corresponding structure “must not only perform the claimed function [but] the specification must clearly associate the structure with the performance of the function.” *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002). The court should first inquire as to whether “structure is described in [the] specification, and, if so, whether one skilled in the art would identify the structure from that description.” *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1381 (Fed. Cir. 1999). “The inquiry is whether one of skill in the art would understand the specification itself to disclose a structure, not simply whether that person would be capable of implementing a structure.” *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 953 (Fed. Cir. 2007).

III. ANALYSIS

The parties have presented two claims from the 529 Patent for construction. Claim 1 recites (with the disputed claim limitations emphasized in bold):

1. An energy conversion device employing an **oscillating resonant converter** producing oscillations, having **DC input terminals** producing a **control signal** and adapted to power at least one gas discharge lamp having heatable filaments, the device comprising:

voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals;

output terminals connected to the filaments of the gas discharge lamp;

control means capable of receiving control signals from the DC input terminals and from the resonant converter, and operable to effectively initiate the oscillations, and to effectively stop the oscillations of the converter; and a direct current blocking means coupled to the output terminals and operable to stop flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective.

Pl.'s Opening App. 14, ECF No. 84-1.

Claim 18 recites (again with the disputed claim limitations emphasized in bold):

18. An energy conversion device employing an **oscillating resonant converter**, having **DC input terminals** and adapted for powering at least one gas discharge lamp having heatable filaments, the device comprising:

voltage source means able to provide a constant or variable magnitude DC voltage between the DC input terminals;

output terminals for connection to the filaments of the gas discharge lamp;

control means able to receive control signals from the DC input terminals and from the resonant converter, and operable to effectively initiate the oscillations, and to effectively stop the oscillations of the converter; and

direct current blocking means coupled to output terminals and operable to stop flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective wherein the direct current blocking means includes a semiconductor diode and is connected effectively across at least one heatable filament of at least one gas discharge lamp.

Pl.'s Opening App. 15, ECF No. 84-1. Independent Claims 1 and 18 are nearly identical, with Claim 18 adding one additional limitation relating to a diode. Pl.'s Opening Br. 14. The parties dispute the construction of three alleged means-plus-function limitations, and four other terms. *Id.* The Court

will turn to the disputed terms and limitations, most of which appear in both Claims 1 and 18.

The parties dispute several terms that initially appear in the preambles and further dispute whether the use of these terms in the preambles should serve as a substantive limitation where those terms appear elsewhere in the claims. Plaintiff LBC concedes that the disputed terms appearing in the preambles provide the antecedent basis for those terms where they appear elsewhere in the claims. Thus, the Court's construction of the preamble terms will necessarily limit the terms for which the preamble provides the antecedent basis. Therefore, the Court need not go further in determining whether the preambles constitute substantive limitations of the claims.

A. “Oscillating Resonant Converter”

The term “oscillating resonant converter” appears in the preambles to Claims 1 and 18. The parties agree that the oscillating resonant converter can convert DC to AC and “includes inductance and capacitance; they also agree that the AC voltage created by the resonant converter is of a frequency close to the resonant frequency determined by the inductive and capacitive elements.” Pl.’s Opening Br. 21. However, they disagree as to whether the term includes both self-excited and driven resonant converters.

1. Plaintiff’s Proposed Construction

Plaintiff LBC argues that “oscillating resonant converter producing oscillations” need not be construed, but in the event that it is proposed a construction as follows: “a circuit, or portion of a circuit, containing inductance, capacitance, and at least one electronic switching device (such as a transistor) that operates to convert direct current into alternating current.” *Id.* LBC notes that this term occurs only in the preambles, and while not conceding “that the Preamble constitutes a substantive limitation, because it does not ‘breath life’ into the claim[,]” LBC agrees that “oscillating

resonant converter” as “recited in the Preamble serves as the antecedent basis for the ‘resonant converter’ recited elsewhere in Claims 1, 2, and 18.” *Id.* LBC’s proposed construction is consistent with its contention that the term “oscillating resonant converter” is not limited to self-excited resonant converters.

2. *Defendant’s Proposed Construction*

Defendant ULT proposes to construe “oscillating resonant converter” as follows: “a self-excited electronic circuit capable of converting a DC voltage to an AC voltage of a resonant frequency determined by a combination of inductive and capacitive elements within the self-excited circuit.” Defs.’ Opening Br. Cl. Const. 11, ECF No. 85. At the heart of ULT’s proposed construction is their argument that the term should be limited to self-exciting oscillating resonant converters. *See id.* Since the term is the antecedent reference to “resonant converter” in the claim limitations, the claims would be limited to self-exciting oscillating resonant converters.

3. *Court’s Analysis and Construction*

Plaintiff LBC urges the Court to reject ULT’s proposed construction because the self-excited electronic circuit limitation, upon which their construction is based, is not supported by either the claim language or specification of the 529 Patent. *See* Pl.’s Opening Br. 21-22. However, ULT argues that the claim language “oscillating resonant converter producing oscillations” necessarily limits the structure to self-excited oscillating resonant converters. Defs.’ Opening Br. 11. ULT’s proposed construction is premised on this contention. *See id.* at 11-13; Defs.’ Resp. Br. 12-14.

ULT’s proposed construction, limiting “oscillating resonant converter” to self-excited oscillating resonant converter, confuses two distinct structures—a resonant circuit and a resonant converter. *See* App. Supp. Pl.’s Resp. Br. Cl. Const. 21, ECF No. 88. In a resonant circuit, “AC

energy is rhythmically transferred, or oscillates, between an inductor and capacitor,” whereas a resonant converter is “composed of a resonant circuit working in combination with an energy converter.” *Id.* at 21-22. In a lamp ballast, “the energy converter converts DC power into high frequency AC power . . . [which then] flows from the energy converter through all or part of the resonant circuit and ultimately powers the lamp.” *Id.* at 22. Thus, “[w]hile all resonant circuits oscillate naturally until their stored energy has been dissipated, the energy converter portion of a resonant converter must be driven by a high frequency signal.” *Id.* In a self-oscillating resonant converter this “drive signal” comes from the resonant circuit itself, whereas in a so-called “driven resonant converter,” the drive signal comes from a “driver” circuit rather than the resonant circuit. *See id.* Therefore, in a true self-excited, or self-oscillating, resonant converter the component energy converter is driven by the other component of the converter, the resonant circuit; but in a driven resonant converter, the energy converter is driven by a separate device. Accordingly, both driven resonant converters and self-excited oscillating resonant converters fall within the ambit of the term “oscillating resonant converter,” because both include, as a component, a resonant circuit which produces oscillations by nature.

ULT’s proposed construction seeks to exclude driven resonant converters from the term “oscillating resonant converter.” To do so, ULT argues that an “oscillating resonant converter producing oscillations” describes only a self-excited oscillating resonant converter. The Court believes that this construction is unduly narrow. As set forth above, no such limitation is implicit or explicit within the claim language as understood by one of ordinary skill in the art. Moreover, the specification explicitly contemplates the use of other non-self-excited resonant converters. *See* 529 Patent at col. 11, ll. 34-39. Thus, ULT’s proposed limitation is not apparent from the language of

the claims, the specification, or the knowledge of one of ordinary skill in the art of designing lighting ballasts. It rests on an unduly narrow interpretation of "oscillating resonant converter" that obscures the fact that both self-exciting and driven resonant converters include a resonant circuit producing oscillations. All of ULT's remaining arguments in support of its proposed construction are based on this premise and occasional imprecise usages of the term in deposition testimony. The Court need not further address the issue.

B. "DC Input Terminals"

This term appears initially in the preambles to Claims 1 and 18 and again appears in three out of the four limitations in each claim. While the parties' dispute revolves around whether the DC input terminals are appropriately understood as conducting elements or points on a schematic, neither party proposes a construction radically different from the other.

1. Plaintiff's Proposed Construction

Plaintiff does not believe that any construction is necessary, but in the event the term is construed LBC suggests "the points at which the ballast receives a direct current voltage." *See* Pl.'s Opening Br. 22.

2. Defendant's Proposed Construction

ULT proposes that "DC input terminals" be defined as "conducting elements that receive a DC input voltage." Defs.' Opening Br. 13.

3. Court's Analysis and Construction

The specification of the 529 Patent at column 3, lines 5-6 speaks directly to the issue of the proper construction of this term: "DC input terminals B+,B- for receiving thereacross a DC supply voltage[.]" This statement unambiguously defines "DC input terminals." *See Interactive Gift*

Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1332 (Fed. Cir. 2001) (“If the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed.”).

Plaintiff LBC prefers to define the “DC input terminals” as mere points on a schematic, whereas Defendant ULT proposes to define them as conducting elements. It is clear that neither party’s proposed constructions are inherently inconsistent with one another; defining the “DC input terminals” as conducting elements is not inconsistent with their being labeled as points on a schematic diagram and *vice-versa*. Moreover, the Court finds that neither proposed construction further clarifies the term beyond the extent to which it is already defined in the specification. Accordingly, the term “DC input terminals” need not be construed beyond the definition provided by the specification: terminals “for receiving . . . a DC supply voltage[.]”

C. “DC input terminals producing a control signal”

Plaintiff LBC acknowledges that this term appears only in the preamble to Claim 1. LBC also concedes that the term “provides the antecedent basis for the ‘control signal[]’ from the DC input terminals” referenced in the ‘control means’ limitations” of Claims 1 and 18. Pl.’s Opening Br. 23. The parties’ dispute revolves around whether the “DC input terminals” produce “a control signal.”

1. Plaintiff’s Proposed Construction

Plaintiff LBC does not believe that any construction of this term is necessary, but in the event it is construed proposes as follows: “DC input terminals” are “the points at which the ballast receives a direct current voltage,” “producing” means “serving as the origin of,” and “control signal [from the DC input terminals]” means “direct current that travels along a direct current path from the DC input terminals, through the filament or filaments, and to an input terminal of the control means, but

which does not pass through the DC blocking means." Pl.'s Opening Br. 23.

2. *Defendant's Proposed Construction*

Like LBC, Defendant ULT reargues its proposed construction of "DC input terminals." With respect to "producing a control signal," ULT argues the limitation fails to comply with section 112, ¶¶ 1 and 2. Therefore, according to ULT, Claims 1 and 18 are invalid in that "DC input terminals" are not capable of producing any type of "control signal." *See* Defs.' Opening Br. 14.

3. *Court's Analysis and Construction*

The specification of the 529 Patent at column 7, lines 48-54, provides that "The device receives a DC voltage at the DC input terminals B+,B- and the capacitors 04,06 are charged DC current starts to flow in the direct current path DCP from terminal B+ through: resistor 09, filament 12, resistor 18, filament 15, diode 39, resistor 40 to charge the capacitor 42[.]" Moreover, Figure 1 of the 529 Patent indicates that the DCP begins at the DC input terminals B+,B- and flows along a dotted line through various structures and filaments to terminal CTa. However, the specification never refers to the DC voltage flowing along the DCP as a "control signal."

ULT seizes upon the fact that the claims "unambiguously require[] that the 'control signal' be *produced by* the 'DC input terminals,' not by other circuit elements." Defs.' Resp. Br. 14. Their argument proceeds as follows: the "DC input terminals," whether they are construed as points at which the ballast receives a direct current voltage or as conducting elements that receive a DC input voltage, are incapable of "producing" a control signal. *See* Defs.' Opening Br. 15. According to ULT:

It is only after the current flowing along the path DCP has passed through the lamp filaments (12,15) and resistors (09, 18) that a control signal results at intermediate terminal (27) to signal the control circuit that non-defective lamp is properly connected to the

“output terminals” of the energy conversion device. This control signal appears on the intermediate terminal (27) and the control terminal (CTa) downstream of the lamp filaments, not at the DC input terminals. If a connection were made along the path DCP at a point upstream of the lamp filaments, the resulting signal would be present whether or not [a] non-defective lamp is connected, and the device would be completely inoperative for the purpose for which it is intended.

Id. One basic assumption underlies this argument: the word “produce” means something more than originate, or point of origin.

The clear language of the specification of the 529 Patent at column 7, lines 51-56, column 8, lines 13-17, 37-40, 47-50, teaches that when a lamp is removed or is defective the DC voltage will not flow through the filaments and thus will not reach the intermediate terminal (27). Moreover, ULT never defines what it means by “producing a control signal;” it assumes that since the “DC input terminals” are merely points or conducting elements they cannot produce a “control signal.” LBC counters that the term “produce” is interchangeable with “originate” and directs the Court to the 529 Patent’s specification and Figure 1 describing the path of the DC current. *See* Pl.’s Opening Br. 24; Webster’s Third New Int’l Dictionary 1810 (1993). The specification and Figure 1 clearly indicate, as LBC argues, that “B+ and B- . . . indicate the points (or terminals or nodes) at which DC enters the ballast and as a point of reference from which the DC control signal flows.” *Id.* While the drafter was perhaps imprecise by referring to a control signal in the claims without clarifying that the control signal was in fact the DC current referred to elsewhere, it is clear from the specification and Figure 1 that the control signal produced by, or originating at, the DC input terminals is the DC voltage running from B+ through the various resistors and filaments to the control terminal (CTa). Therefore, “DC input terminals” means terminals for receiving a DC supply voltage, “producing” means serving as the origin of, and “control signal” means DC that travels along a direct current path

from the DC input terminals, through the filament or filaments, and to an input terminal of the controls means, but which does not pass through the DC blocking means.

D. Reconsideration of “Voltage Source Means” Limitation

The parties dispute whether the limitation “voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals” is a means-plus-function limitation, subject to construction as limited by section 112, ¶ 6. LBC argues that “voltage source” connotes sufficient structure to one skilled in the art and that it should avoid treatment as a means-plus-function limitation. In the alternative, LBC argues that if the Court determines that section 112, ¶ 6 applies, then the specification discloses the corresponding structure. ULT argues that the term should be treated as a means-plus-function limitation because it is written in means-plus-function format, and furthermore, that the specification does not disclose a corresponding structure, making both claims in which the limitation appears indefinite.

1. Plaintiff’s Proposed Construction

LBC argues that this limitation, while using the term “means,” is not a means-plus-function limitation because the entire limitation “connotes sufficient structure to one skilled in the art” and has an understood meaning in the art when read in the context of the specification. *See* Pl.’s Opening Br. 14-15. Specifically, according to LBC, “voltage source means [providing (claim 1), able to provide (claim 18)] a constant or variable magnitude DC voltage between the DC input terminals” connotes the structure of a rectifier to anyone skilled in the art. *Id.* at 15. As support for this assertion LBC points to testimony from Andrew Bobel, the inventor, who has several years of experience working on electronic ballast designs, and Dr. Victor Roberts, an expert witness. *Id.* Both Bobel and Dr. Roberts testify, that as persons skilled in the art, the “voltage source means” limitation clearly

connotes the structure of a rectifier. Pl.’s Opening App. Ex. 2-A at 226, ECF No. 84-3; Ex. 3 at 7-8, ECF No. 84-7. In the alternative, LBC argues that if the Court determines that section 112, ¶ 6 applies, making the limitation a means-plus-function limitation, then the specification discloses the structure of a rectifier. Pl.’s Opening Br. 15-16.

2. Defendant’s Proposed Construction

ULT argues that this limitation is governed by section 112, ¶ 6 as a means-plus-function limitation. Defs.’ Opening Br. 16. First, ULT points to the use of the term “means,” which presumptively invokes section 112, ¶ 6. *Id.* Secondly, according to ULT, the limitation itself clearly recites a function only. *Id.* And third, the claim language does not point to any structure. *Id.* Thus, ULT asserts, this limitation is a classic means-plus-function limitation and must be construed according to section 112, ¶ 6. ULT then goes on to argue that the specification does not disclose any structure, a rectifier or otherwise, for performing the claimed function. *Id.* 18-20. Accordingly, ULT urges that Claims 1 and 18 should be held invalid because they are indefinite.

3. Court’s Analysis and Construction

The Court previously adopted the proposed construction of Defendant ULT. See Memorandum Opinion and Order, August, 19, 2010. The Court found that the “voltage source means” limitation was written in the classic means-plus-function format, that it recited only a function, and did not disclose sufficient structure to remove it from the ambit of section 112, ¶ 6. *See id.* at 10-12. The Court, construing the “voltage source means” limitation as a means-plus-function limitation, went on to find that “Lighting Ballast . . . failed to identify a structure in the 529 Patent’s specification that corresponds to the ‘voltage source means’ limitation, contrary to the requirements of 35 U.S.C. § 112, ¶ 6.” *Id.* at 17. Accordingly, the Court found both Claims 1 and

18 to be invalid as indefinite under section 112, ¶ 2 because the specification failed to disclose a structure corresponding to the functional limitation. *Id.* at 18-19.

In its Motion for Reconsideration, LBC argues that in so construing the “voltage source means” limitation the Court improperly discounted “the importance of the functional language following ‘means’” and the unchallenged expert testimony in the record from Bobel and Dr. Roberts. *See* Pl.’s Mot. Recons. 2-6, ECF No. 102. In its response, ULT focuses on the standards applicable to a post-judgement motion under Rule 59 of the Federal Rules of Civil Procedure and argues that LBC has not identified any proper basis for the Court to reconsider its ruling that the “voltage source means” limitation is subject to construction under section 112, ¶ 6. *See* Def.’s Resp. 1-2, ECF No. 104. ULT supports the Court’s prior ruling by arguing that the Court expressly considered all the recited claim language, properly considered LBC’s expert testimony, and found that it does not support LBC’s desired outcome. *See id.* at 2-7.

After careful consideration, research, and deliberation the Court finds that in issuing its previous claim construction order it erred in its construction of the “voltage source means” limitation. The Court’s prior ruling unduly discounted the unchallenged expert testimony, in light of Federal Circuit precedent on the issue, offered by Bobel and Dr. Roberts regarding the knowledge of one of ordinary skill in the electronic ballast field. Under Rule 54(b) of the Federal Rules of Civil Procedure, the Court may freely review and revise interlocutory orders at any time before the entry of a final judgment adjudicating all claims of all parties before the Court. Therefore, the Court may modify a prior ruling if the arguments of the parties or new evidence persuade the Court to do so for any reason, so long as the Court is not making a legal error or abusing its discretion. *See Matagorda Ventures Inc. v. Travelers Lloyds Ins. Co.*, 208 F. Supp. 2d 687, 688 (S.D. Tex. 2001) (interlocutory

orders of the court are subject to revision on motion or *sua sponte* before entry of final judgment). Moreover, the Federal Circuit has expressly noted the need for district courts to entertain motions to reconsider in the specific context of claim construction. *See Jack Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1352, 1361 (Fed. Cir. 2002) (“District courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves. This is particularly true where issues involved are complex, either due to the nature of the technology or because the meaning of the claims is unclear from the intrinsic evidence.”)² *see also Union Oil Co. v. Atl. Richfield Co.*, 1998 WL 34238564 at *2 (C.D. Cal. Mar. 6, 1998) (noting that motion to reconsider is proper vehicle by which to challenge a claim construction order). LBC’s motion for reconsideration is granted, in part, and denied, in part, as explained below.

The parties dispute whether the limitation “voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals” is a means-plus-function limitation, subject to section 112, ¶ 6. The Court begins with the presumption that this is a means-plus-function limitation, subject to construction under section 112, ¶ 6 because it uses the term “means.” *See Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1361 (Fed. Cir. 2000). Plaintiff LBC, as the party advocating a construction outside of section 112, ¶ 6, has the burden of overcoming the presumption. *See Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319-20 (Fed. Cir. 2004). This presumption will collapse if the claim describes sufficient structure for performing the recited function, despite its use of the term “means.” *See Apex, Inc. v. Raritan Computer, Inc.*, 325

² Although the Court has revised its construction of the “voltage source means” limitation in response to Plaintiff’s Motion for Reconsideration, the Court does not imply, by this quote, that any further revisions to any of the Court’s claim constructions in this order will be necessary or likely. A settled claim construction order is required for this case to proceed.

F.3d 1364, 1372 (Fed. Cir. 2003); *see also Personalized Media*, 161 F.3d at 704 (In deciding whether the presumption has been rebutted “the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of § 112, ¶ 6.”); *Rodime PLC v. Seagate Tech., Inc.*, 174 F.3d 1294, 1302 (Fed. Cir. 1999) (“[E]ven if the claim element specifies a function, if it also recites sufficient structure . . . for performing that function, § 112, ¶ 6 does not apply.”). In order to avoid means-plus-function construction the “voltage source means” limitation need not denote a specific structure, it is sufficient if the term is used “in common parlance or by persons of skill in the pertinent art to designate structure, *even if the term covers a broad class of structures and even if the term identifies the structures by their function.*” *Lighting World*, 382 F.3d at 1359-60 (emphasis added); *see also Apex*, 325 F.3d at 1372 (“[T]his court inquires into whether the ‘term, as the name for the structure, has a reasonably well understood meaning in the art,’ keeping in mind that a claim term ‘need not call to mind a single well-defined structure’ to fall within the ambit of § 112, ¶ 6.”) In *Comtech EF Data Corp. v. Radyne Corp.*, 2007 U.S. Dist. LEXIS 97038 (D. Ariz. Oct. 12, 2007) *aff’d in relevant part*, 2008 U.S. Dist. LEXIS 26966 (D. Ariz. Mar. 31, 2008), a special master appointed by the district court confronted a similar claim term with a curious and seemingly unnecessary use of “means.”

The term at issue in *Comtech* stated “power supply means for supplying power.” *Id.* at *31. The special master first determined that the drafter’s use of “means” was most likely not intended to invoke section 112, ¶ 6 because it was clear that no corresponding structure was disclosed in the specification. *Id.* at *33. The special master’s report and recommendation went on to explain the drafter’s use of “means” was based on “the highly likely proposition that, in the context of the claimed invention, a person of ordinary skill in the art would recognize that ‘power supply’ connotes

a well understood class of structures[.]” *Id.* at 34. Referencing *Lighting World*,³ the special master held that “power supply means” did not “denote a specific structure, but it is understood by persons of skill in the RF converter system art to designate a broad class of structures that supply power appropriate to the claimed system.” *Id.* at *36. Thus, the “power supply means” term was understood by those of ordinary skill in the industry to describe structure. *See id.* The Court believes this rationale applies equally to the “voltage source means” term in the 529 Patent.⁴

LBC presents the testimony of Dr. Roberts and the inventor, Andrew Bobel, to support its contention that the “voltage source means” limitation connotes the structure of a rectifier to anyone skilled in the art of designing electronic ballasts. According to Dr. Roberts:⁵

The “voltage source” limitation connotes, or suggests, to me, and would connote to anyone skilled in the art, the structure of a rectifier—with its input terminals connected to an AC power line and with its output terminals connected to the DC input terminals. In other words, the only way for a lighting ballast to convert AC (from a “power line source” such as a wall outlet or other similar AC power source in a home or office) into DC (for use as the “DC supply voltage”) is through a rectifier. In the vast majority of applications, including nearly all common applications for residential and commercial uses, the ballast receives its power from an AC power

³ 382 F.3d at 1360 (“What is important is whether the term is one that is understood to describe structure, as opposed to a term that is simply a nonce word or a verbal construct that is not recognized as the name of structure[.]”).

⁴ Defendant ULT continues to urge the Court to accept the approach laid out in *Nilssen v. Motorola, Inc.*, 80 F. Supp. 2d 921, 928 (N.D. Ill. 2000), where the district court found that “source means having AC terminals and being operative to provide an AC voltage thereat” did not recite sufficient structure. As will explained *infra*, this Court finds the approach of *Comtech* to be in line with Federal Circuit precedent regarding the importance of considering functional language to determine whether sufficient structure is disclosed. Moreover, *Comtech* focuses on the knowledge and understanding of one skilled in the art relative to the language of the claim term as a whole.

⁵ Dr. Roberts has an extensive background in electrical engineering, applied physics, power electronics, lighting ballast design, and various other types of lighting-related technologies. Defendant ULT does not appear to dispute Dr. Roberts’ qualifications or the substance of his opinions, rather ULT questions LBC’s use of his testimony itself. For Dr. Roberts’ qualifications *see Decl. Victor D. Roberts, Ph.D. Supp. Pl.’s Opening Br. Claim Construction 1-3*, ECF No. 84.

source, and that AC power is converted into DC power through the use of a rectifier. A battery could likewise provide the necessary DC supply voltage described in the patent, but in reality, such an arrangement would be used if [sic] very few applications. In either case, one skilled in the art would immediately ascertain and implement the structure necessary to supply the DC supply voltage, based on the particular application of the ballast in question. Stated otherwise, the “voltage source” limitation, when read in the context of the specification and claims, suggests to me a sufficient structure, or class of structures, namely: a rectifier (if converting AC from a “power line source” to DC for a “DC supply voltage”) or, in a very few specialized applications, a battery (if providing the DC supply voltage directly to the DC input terminals).

Decl. Victor D. Roberts, Ph.D. Supp. Pl.’s Opening Br. Claim Construction 7-8, ECF No. 84.

Additionally, Bobel, in his deposition, offered that as one skilled in the art of designing lighting ballasts, the “voltage source means” limitation connotes a structure that will “rectify the line.” Bobel Dep. 226:15-227:25, ECF No. 84. Bobel also testified that when he drafted the term he intended to suggest physical structure to those skilled in the art. *Id.* at 229:14-18. ULT presents no expert testimony contradicting the opinions of Dr. Roberts and Bobel, that one of skill in the lighting ballast design art would understand the “voltage source means” term to disclose a rectifier.

The “voltage source means” term and Claims 1 and 18, of which it is a part, must be read in the context of the specification of the 529 Patent, although the Court relies primarily on the language of the claims themselves. *See Apex*, 325 F.3d at 1373; *see also Rodime*, 174 F.3d at 1302. Like the term at issue in *Comtech*, the Court finds that while the “voltage source means” term does not denote a specific structure, it is nevertheless understood by persons of skill in the lighting ballast design art to connote a class of structures, namely a rectifier, or structure to rectify the AC power line into a DC voltage for the DC input terminals. The Court’s prior construction of this term, and ULT’s proposed construction, exalted form over substance and disregarded the knowledge of a person of

ordinary skill in the art. *See Phillips*, 415 F.3d at 1313.

Moreover, it is in keeping with Federal Circuit precedent to refer to the functional language following “voltage source means” in determining whether the term connotes sufficient structure to avoid section 112, ¶ 6. *See Mass. Inst. of Tech.*, 462 F.3d at 1356; *see also Linear Tech.*, 379 F.3d at 1320. This functional language, “providing a constant or variable magnitude DC voltage between the DC input terminals,” when read by one familiar with the use and function of a lighting ballast, such as the one disclosed by the 529 Patent, would understand a rectifier is, at least in common uses, the only structure that would provide “a constant or variable magnitude DC voltage.” The remaining language, “between the DC input terminals,” merely describes the path of the DC voltage provided by the rectifier. According to Dr. Roberts:

The ballast described in the preferred embodiment of the 529 Patent receives AC from “a power line source,” such as an electrical outlet in an office building, converts it to DC for use during the initial start-up phase, and then, upon receipt of a “DC control signal” by the ballast’s control circuit, generates a higher frequency AC power for use in pre-heating the lamp filaments and for powering the lamps.

Roberts Decl. 6-7. It is clear to one skilled in the art that to provide a DC voltage when the source is a power line, which provides an AC voltage, a structure to rectify the line is required and is clear from the language of the “voltage source means” term. To hold otherwise would disregard the meaning this limitation would have to a person of ordinary skill in the lighting ballast design art. Although the term describes a rectifier by its function, this in and of itself is not objectionable. *See Mass. Inst. of Tech.*, 462 F.3d at 1356.

The Court also finds persuasive the fact that the “voltage source means” element’s disclosure of structure is clear excluding the generic use of “means,” which would read “voltage source . . . providing a constant or variable magnitude DC voltage between the DC input terminals.” *See Cole*

v. Kimberly-Clark Corp., 102 F.3d 524, 531 (Fed. Cir. 1996) (“Here, the claim drafter’s perfunctory addition of the word ‘means’ did nothing to diminish the precise structural character of this element.”); *see also Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1348 (Fed. Cir. 2002); *Comtech*, 2007 U.S. Dist. LEXIS 97038 at *33-38. The drafter’s use of the term “means” seems unnecessary but does not diminish the element’s disclosure of structure, or a class of structures, to one skilled in the art. Accordingly, the Court finds that Plaintiff LBC has successfully overcome the presumption that section 112, ¶ 6 applies to the “voltage source means” element of Claims 1 and 18 of 529 Patent. As such, the Court construes these limitations according to their ordinary meaning in the art.

E. “Control Means” Element

The parties agree that the limitation “[capable of receiving (Claim 1)/able to receive (Claim 18)] control signals from the DC input terminals and from the resonant converter, and operable to effectively stop the oscillations of the converter” should be construed in accordance with section 112, ¶ 6, that it recites three functions, and lastly, they agree on the structure corresponding to two of the functions. *See* Defs.’ Resp. Br. 7. The parties disagree as to whether the specification discloses a structure related to the remaining function. *See id.*

Specifically, the parties agree that the structure corresponding to the function “operable to effectively initiate the oscillations and to effectively stop the oscillations” is set forth at column 3, line 50, through column 4, line 21 of the 529 Patent. *See id.* They also agree that the structures corresponding to the “effectively stop the oscillations” function are the diode 29, resistor 30, resistor 32, capacitor 33, transistor 48, and diac 45 connected as described in the 529 Patent. *See id.* The only disagreement between the parties is whether the 529 Patent discloses a structure to correspond

to the function of “receiving a control signal from the DC input terminals[.]” *See id.*

1. *Plaintiff’s Proposed Construction*

To perform the function of “receiving a control signal from the DC input terminals[.]” Plaintiff LBC identifies the structure of the control circuit, labeled as 58 in Figure 1 and discussed at column 3, line 59 through column 4, line 21 of the 529 Patent. *See Pl.’s Opening Br. 17.* According to LBC, “[t]he dotted line in Figure 1 clearly shows a DC control signal, which originates at the DC input terminal B+ and travels through the filaments to the control circuit 58, where the signal is received and processed.” *Id.*

2. *Defendant’s Proposed Construction*

Defendant ULT argues there is no corresponding structure for “receiving a control signal from the DC input terminals.” *See* Defs.’ Opening Br. 21. According to ULT, the control circuit described in the specification at column 3, line 59 through column 4, line 21 does not receive any control signal from the DC input terminals. Rather, ULT asserts that any “control signals applied to the control circuit 58 are received only from the intermediate node 27 within the resonant converter; there is no control signal input to the control circuit from the DC input terminals.”⁸ *Id.* at 22. Thus, the lack of any corresponding structure, material, or act renders Claims 1 and 18 invalid under section 112, ¶¶ 1 and 2. *See id.*

3. *Court’s Analysis and Construction*

ULT’s argument that the specification of the 529 Patent fails to disclose a structure to perform the function of “receiving a control signal from the DC input terminals” is based on the same premise as ULT’s argument that the DC input terminals do not produce a control signal,

⁸ ULT also makes the same argument in support of their construction of the term “DC input terminals producing a control signal.” *See supra* at Part III(C)(3) where this argument is fully laid out.

which the Court rejected *supra* at Part III(C)(3). ULT argues that since the DC input terminals cannot produce a control signal then the specification of the 529 Patent does not teach DC input terminals producing a control signal; therefore, the control means cannot possibly receive a control signal from the DC input terminal and there can be no corresponding structure for a function that the patent doesn't teach. *See* Defs.' Opening Br. 22; Pl.'s Resp. Br. 8. The Court rejected ULT's premise—that the DC input terminals do not produce a control signal—*supra* at Part III(C); the Court adopts and incorporates that discussion herein. Therefore, the specification of the 529 Patent discloses a structure, namely a control circuit, at column 3, line 59 through column 4, line 21 corresponding to the function of “receiving a control signal from the DC input terminals.”

F. “Direct current blocking means”

The parties agree that the limitation “direct current blocking means coupled to the output terminals and operable to stop flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective” is a means-plus-function limitation governed by section 112, ¶ 6. *See* Pl.'s Opening Br. 18. The parties disagree on the named function and the corresponding structure.

1. Plaintiff's Proposed Construction

Plaintiff LBC argues the function should include language beyond that which is recited in the “direct current blocking means” limitation of Claims 1 and 18. LBC proposes to construe the function as follows: “To stop the flow of the DC control signal when the lamp is removed or defective and, upon replacement, to facilitate the heating of the filaments.” *See id.* The language describing the heating of the filaments upon replacement of the lamp does not appear in “direct current blocking means” limitation. As corresponding structure LBC proposes “a DC blocking

circuit that has a series connected secondary winding with a capacitor or diode [for Claim 18: DC blocking circuit must include diode].” *Id.*

2. *Defendant’s Proposed Construction*

Defendant ULT argues it would be improper to import language to the “direct current blocking means” which has the effect of adding a new function that is not recited in the limitation. ULT asks the Court to construe the function as follows: “stop the flow of the control signal from the DC input terminals whenever at least one gas discharge lamp is removed from the output terminals or is defective.” *See* Defs.’ Opening Br. 23. As corresponding structure, ULT suggests a “capacitor or diode connected to the heatable filament of the lamp” for Claim 1 and “a diode connected to the heatable filament of the lamp” for Claim 18. *Id.*

3. *Court’s Analysis and Construction*

The specification of the 529 Patent discloses the structure of two DC blocking circuits which are each composed of a series connected secondary winding with capacitor or diode connected across the output terminals of the lamp. *See* 529 Patent, col. 3, ll. 53-58. The specification also makes clear that the DC blocking circuit structures perform two functions: (1) preheating the filaments of the lamp via the secondary windings and (2) stopping the DC current from flowing through the circuits when the direct current path between terminal B+ and terminal CTa is broken via a capacitor or diode. *See id.* at col. 7, ll. 63-65, col. 8, ll. 38-43. However, the “direct current blocking means” limitation recites only one of these functions—“stop the flow of the control signal from the DC input terminals whenever at least one gas discharge lamp is removed from the output terminals or is defective.” The only reference to “heatable filaments” in Claims 1 and 18 comes from the preambles which describe the type of gas discharge lamp.

LBC argues that the Court should import the filament preheating function of the DC blocking circuits because the specification indicates that the structures that perform this function, the secondary windings, are component parts of the DC blocking circuits. LBC thus argues that any claim that includes within its scope a gas discharge lamp having heatable filaments necessarily implies the filament preheating function performed by the secondary windings. The Court agrees with LBC that the appropriate test for whether a limitation appearing only in the specification may be applied to limit all claims in a patent is laid out in *Alloc, Inc. v. International Trade Commission*, 342 F.3d 1361, 1370 (Fed. Cir. 2003):

[A court] must interpret the claims in light of the specification, yet avoid impermissibly importing limitations from the specification. That balance turns on how the specification characterizes the claimed invention. In this respect, this court looks to whether the specification refers to a limitation only as a part of less than all possible embodiments or whether the specification read as a whole suggests that the very character of the invention requires the limitation be a part of every embodiment. . . . [W]here the specification makes clear at various points that the claimed invention is narrower than the claim language might imply, it is entirely permissible and proper to limit the claims.

(internal citations omitted). However, neither the facts nor the reasoning of *Alloc* support LBC's proposed construction of the "direct current blocking means" limitation.

The Federal Circuit in *Alloc*, using the above-quoted test, was actually *limiting* the claimed invention in a way that was *narrower* than the claim language otherwise implied. *See id.* at 1370. Specifically at issue in *Alloc* was whether the claimed invention required "play" in every embodiment. *See id.* at 1369. The Federal Circuit determined that "the . . . specification read as a whole leads to the inescapable conclusion that the claimed invention must include play in every embodiment." *Id.* at 1370. Thus, even though the claims did not explicitly require play and thereby

appeared to have a broader scope, the court held that the scope of the claims, in light of the specification and prosecution history, must be limited to include only embodiments with play. *See id.* at 1372. In contrast, LBC seeks to add an omitted function to the language of the “direct current blocking means” limitation; by doing so LBC would *broaden* the claim language and scope rather than *narrow* it. The facts and reasoning of the *Alloc* case are distinguishable and do not support LBC’s proposed function of the “direct current blocking means” limitation. *Alloc* stands for the proposition that the scope of a patent’s claims may not be broader than the specification’s characterization of the invention. *Alloc* does not allow a patentee to expand the scope of *some* claims by importing language, in the form of an additional function for purposes of section 112, ¶ 6, from the specification.

The sole function disclosed in the “direct current blocking means” limitation is “operable to stop the flow of the control signal from the DC input terminals[.]” No additional function, such as one facilitating the heating of the filaments, is present in this limitation; and to declare as much would impermissibly depart from the actual language of the claim. *See Micro Chem. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999) (“The statute does not permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim.”). The specification ties the structure of the DC blocking circuits to the function of stopping “the flow of the control signal from the DC input terminals[.]” The other function, which LBC seeks to add to the limitation, preheating the filaments, is specifically tied to the secondary windings, not the DC blocking circuit. *See* col. 7, ll. 63-65. However, according to the specification and Figure 1, the secondary windings are components of the DC blocking circuits. *See* Col. 7:53-58, Figure 1 (07, 26).

LBC argues that since the secondary windings are part of the DC blocking circuit they should be considered corresponding structure. *See* Pl.'s Opening Br. 19-20. According to LBC:

The inventor's chosen word order [referring to specification's disclosure of the DC blocking circuit] is persuasive: it emphasizes the importance of the secondary winding and demonstrates that the winding is not an afterthought but rather is central to the role played by the "DC blocking circuit." In fact, the specification teaches that the recited capacitor and diode may be interchangeable but makes no such allowance for the secondary winding. Bobel, as his own lexicographer, chose to define the blocking circuitry to include a secondary winding. In light of his unambiguous definition, Defendants' attempt to exclude the secondary winding from the corresponding structure must be rejected.

Id. at 20. ULT responds that only the capacitor or diode component of the DC blocking circuit is necessary to perform the function of "operable to stop flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective" and thus the patent only discloses the DC blocking circuit, insofar as it consists of a capacitor or diode, as the corresponding structure. *See* Defs.' Resp. Br. 10-11.

In determining the proper corresponding structure for the function of stopping the flow of the control signal from the DC input terminals, the Court must look only to structures in the specification that are necessary to perform this function. *See Micro Chem.*, 194 F.3d at 1258 ("Nor does the statute permit incorporation of structure from the written description beyond that necessary to perform the claimed function."). Moreover, the structure must actually perform the function of stopping the flow of the control signal and not merely enable another structure to do so. *See Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1371 (Fed. Cir. 2001) ("The corresponding structure to a function set forth in a means-plus-function limitation must actually perform the recited function, not merely enable the pertinent structure to operate as intended[.]"). The secondary windings,

located in series before the capacitor or diode, depending on the claim, within the DC control circuit, cannot be structure corresponding to the function the DC blocking means.

According to ULT, “[f]irst, the specification of the ‘529 patent does not link the secondary winding with the *function* of the DC blocking means. Second, it is without question that the secondary winding is not necessary to *or capable of* performing the claimed function of the DC blocking means (i.e. blocking the direct current signal).” Defs.’ Resp. Br. 11 (emphasis in original). The Court agrees, LBC does not dispute that the secondary windings do not, and are incapable of, blocking the control signal from the DC input terminals. Direct current merely passes through the secondary windings to the capacitor or diode, which is the structure that actually performs the function of the DC blocking means within the DC control circuit. ULT goes on to argue that “the secondary winding may help enable the invention of the patent-in-suit to perform other functions does not mean that the secondary winding enables the ‘DC blocking means’ to perform its claimed function.” *Id.* Again, the Court agrees; the function of the secondary windings is to preheat the filaments in a gas discharge lamp, they have nothing to do with the function of the DC blocking means. LBC’s argument to the contrary rests merely on the fact that the drafter chose to include the secondary windings as a part of the DC blocking circuit, this placement does not affect the function of the secondary windings. See *Cardiac Pacemakers*, 296 F.3d at 1113 (“[T]he structure must not only perform the claimed function but the specification must clearly associate the structure with performance of the function.”). While the specification clearly links the DC blocking circuit to the function of stopping the flow of the control signal, it does not associate the secondary windings with any such function. The only function of the secondary windings, as disclosed by the specification, is to preheat the lamp filaments.

G. "Whenever at least one gas discharge lamp. . ."

Lastly, the parties dispute this phrase from the "direct current blocking means" of claims 1 and 18: "whenever at least one gas discharge lamp is removed from the output terminals or is defective[.]" ULT urges the Court to construe this phrase as follows:

Whenever at least one gas discharge lamp is removed from the output terminals or is defective, the direct current blocking means operates to stop flow of the control signal through the filaments to the control means, thereby to prevent self-excitation of the resonant converter and hence starting of the oscillation of the ballast.

Defs.' Opening Br. 25. By this proposed construction, ULT again urges that a self-excited oscillating resonant converter limitation is appropriate. The Court has previously rejected this proposed construction with regard to the term "oscillating resonant converter" as it appeared in the preambles. The Court adopts and incorporates its reasoning rejecting ULT's proposed construction limiting "oscillating resonant converter" to self-excited resonant converters *supra* at Part III(A) and finds that this phrase needs no further construction.

IV. CONCLUSION

Based on the foregoing, the Court construes the following terms and limitations in the 529 Patent as follows:

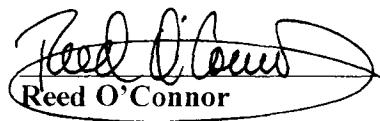
1. In the preambles to Claims 1 and 18 respectively of the 529 Patent "oscillating resonant converter producing oscillations" means "a circuit, or portion of a circuit, containing inductance, capacitance and at least one electronic switching device (such as a transistor) that operates to convert direct current into alternating current."
2. In the preambles to Claims 1, 4, and 18 respectively of the 529 Patent "DC input terminals" means "terminals for receiving a DC supply voltage."

3. In the preamble to Claim 1 of the 529 Patent “producing a control signal” means “serving as the origin of direct current that travels along a direct current path from the DC input terminals, through the filament or filaments, and to an input terminal of the control means, but which does not pass through the DC blocking means.”
4. In Claims 1 and 18 of the 529 Patent “voltage source means providing a constant or variable magnitude DC voltage between the DC input terminals” shall be construed according to its ordinary meaning and in accordance with the Court’s reasoning in Part III(D)(3) *supra*.
5. In Claims 1 and 18 of the 529 Patent “control means capable of receiving a control signal from the DC input terminals and from the resonant converter, and operable to effectively initiate the oscillations, and to effectively stop the oscillations of the converter” shall be construed according to section 112, ¶ 6 as reciting three functions with the specification disclosing the structures corresponding to those functions as set forth *supra* in Part III(E).
6. In Claims 1 and 18 of the 529 Patent “direct current blocking means coupled to the output terminals and operable to stop flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective” shall be construed according to section 112, ¶ 6 as reciting the function “operable to stop the flow of the control signal from the DC input terminals, whenever at least one gas discharge lamp is removed from the output terminals or is defective,” and the specification disclosing the structure corresponding to that function as a capacitor or diode within the control circuit, as

set forth *supra* in Part III(F)(3).

7. In Claims 1 and 18 of the 529 Patent the phrase “whenever at least one gas discharge lamp is removed from the output terminals or is defective” shall be construed according to its ordinary meaning and in accordance with the Court’s reasoning in Part III(G)(3) *supra*.

SO ORDERED on this **2nd** day of **December, 2010**.


Reed O'Connor
UNITED STATES DISTRICT JUDGE